

NOT YET SCHEDULED FOR ORAL ARGUMENT

Nos. 18-1203, 18-1205, 18-1206, 18-1208, 18-1212, 18-1214

---

U.S. COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

---

Clean Wisconsin et al,  
Petitioners,

v.

U.S. Environmental Protection Agency and  
Andrew R. Wheeler, Administrator, U.S. Environmental Protection Agency,  
Respondents, and

BCCA Appeal Group et al,  
Intervenors.

---

On Petition for Review of a Final Agency Action of  
the U.S. Environmental Protection Agency

---

**EPA's Proof Answering Brief**

---

Jeffrey Bossert Clark  
Assistant Attorney General

Sue Chen  
Tsuki Hoshijima  
U.S. Department of Justice  
Environment & Natural Resources Div.  
Environmental Defense Section  
P.O. Box 7611  
Washington, D.C. 20044  
202.305.0283  
sue.chen@usdoj.gov

*Of counsel*  
Seth Buchsbaum  
U.S. Environmental Protection Agency  
Office of General Counsel  
Washington, D.C.

---

**CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES**

As required by D.C. Circuit Rule 28(a)(1), EPA certifies:

**A. Parties and amici**

All parties appearing here are listed in Petitioners' Joint Opening Brief.

New York, Connecticut, Delaware, Maine, Maryland, Minnesota, New Jersey, Oregon, Rhode Island, Vermont, Washington, Massachusetts, and the District of Columbia filed a brief as amici curiae on February 1, 2019.

American Petroleum Institute notified the Court on April 8 of its intent to file a brief as amicus curiae. The Colorado Oil & Gas Association, Colorado Association of Commerce and Industry (dba the Colorado Chamber of Commerce), and the Colorado Farm Bureau did the same thing on May 10.

**B. Rulings under review**

Under review is EPA's final rule, "Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards," 83 Fed. Reg. 25,776 (June 4, 2018).

**C. Related cases**

These consolidated cases were not previously before this or any other court.

/s/ Sue Chen  
Sue Chen  
Counsel for Respondents

## TABLE OF CONTENTS

Certificate as to Parties, Rulings, and Related Cases .....	ii
Table of Authorities .....	v
Glossary.....	x
Introduction.....	1
Statement of Jurisdiction.....	2
Issues Presented .....	2
Statutes and Regulations .....	3
Statement of the Case.....	4
I.    The designation process under the Clean Air Act.....	4
II.   Designating for the 2015 ozone standards. ....	6
III.  A primer on how EPA draws nonattainment boundaries.....	7
Standard of Review .....	12
Summary of Argument .....	13
Argument.....	14
I.    Petitioners have not shown standing for certain designations. ....	14
II.   EPA reasonably designated nonattainment the half of Lake County, Indiana that generates almost all county emissions. ....	18
III.  EPA reasonably designated the St. Louis nonattainment area.....	20
A.  EPA revised its initial analysis of Jefferson County, Missouri after seeing updated data that shows improved air quality. ....	20

1.	Petitioners ignore the updated data.....	22
2.	EPA treated Jefferson and Franklin Counties differently because they are different. ....	23
3.	Petitioners misconstrue EPA’s holistic analysis. ....	24
B.	EPA designated Monroe County, Illinois in light of updated data. ....	26
IV.	Relying on Wisconsin’s analysis, EPA properly designated part of Sheboygan County nonattainment. ....	29
V.	The location of Door County, Wisconsin’s monitor and other factors support designating part of the county nonattainment. ....	37
VI.	EPA reasonably concluded that Ottawa County, Michigan was not part of a “nearby” area that had to be analyzed for contribution. ....	42
A.	EPA acted well within its discretion to reject a study that used stale data and offered incomplete analysis. ....	46
B.	Petitioners’ other contribution arguments are meritless. ....	47
VII.	Unique topography and other factors justify excluding northern Weld County from the Denver nonattainment area. ....	49
A.	EPA applied the correct contribution analysis.....	52
B.	Petitioners, not EPA, distort local topography. ....	54
C.	Petitioners’ other arguments are meritless.....	57
VIII.	The Court should remand the remaining designations without vacatur. ....	59
	Conclusion .....	63
	Certificates of Compliance and Service.....	64

## TABLE OF AUTHORITIES

### Cases

<i>Air Transport Ass’n of Am. v. Civil Aeronautics Bd.</i> , 732 F.2d 219 (D.C. Cir. 1984) .....	28
<i>Alfred L. Snapp &amp; Sons, Inc. v. Puerto Rico ex rel Barez</i> , 458 U.S. 592 (1982) .....	16
<i>Allied-Signal, Inc. v. U.S. Nuclear Regulatory Comm’n</i> , 988 F.2d 146 (D.C. Cir. 1993) .....	61
<i>Am. Petroleum Inst. v. Costle</i> , 665 F.2d 1176 (D.C. Cir. 1981) .....	6
<i>ATK Launch Sys., Inc. v. EPA</i> , 669 F.3d 330 (D.C. Cir. 2012) .....	8
<i>B.J. Alan Co. v. Interstate Commerce Comm’n</i> , 897 F.2d 561 (D.C. Cir. 1990) .....	60
<i>Bd. of Regents of Univ. of Wash. v. EPA</i> , 86 F.3d 1214 (D.C. Cir. 1996) .....	36, 45
<i>*Catawba Cty., N.C. v. EPA</i> , 571 F.3d 20 (D.C. Cir. 2009) .....	8, 12, 13, 22, 28, 29, 53, 58
<i>City of Boston Delegation v. FERC</i> , 897 F.3d 241 (D.C. Cir. 2018) .....	14
<i>Ctr. for Biological Diversity v. EPA</i> , 861 F.3d 174 (D.C. Cir. 2017) .....	61, 62
<i>Ctr. for Biological Diversity v. U.S. Dep’t of Interior</i> , 563 F.3d 466 (D.C. Cir. 2009) .....	16, 17

\*Authorities chiefly relied upon are marked with an asterisk.

<i>EPA v. EME Homer City Generation, LP</i> , 572 U.S. 489 (2014) .....	53
<i>Ethyl Corp. v. Browner</i> , 989 F.2d 522 (D.C. Cir. 1993) .....	60
<i>Fed. Power Comm’n v. Idaho Power Co.</i> , 344 U.S. 17 (1952) .....	62
<i>Georgia v. Tenn. Copper Co.</i> , 206 U.S. 230 (U.S. 1907) .....	16
<i>In re Ozone Designation Litig.</i> , 286 F. Supp. 3d 1082 (N.D. Cal. 2018) .....	7
<i>Limnia, Inc. v. U.S. Dep’t of Energy</i> , 857 F.3d 379 (D.C. Cir. 2017) .....	59
<i>Lujan v. Defenders of Wildlife</i> , 504 U.S. 555 (1992) .....	14
<i>Massachusetts v. EPA</i> , 549 U.S. 497 (2007) .....	16
<i>*Miss. Comm’n on Env’tl. Quality v. EPA</i> , 790 F.3d 138 (D.C. Cir. 2015) .....	1, 5, 6, 8, 12, 20, 22, 24, 29, 37, 39, 42, 46, 53, 58, 61
<i>Nat’l Ass’n of Clean Air Agencies v. EPA</i> , 489 F.3d 1221 (D.C. Cir. 2007) .....	40, 57
<i>North Carolina v. EPA</i> , 531 F.3d 896 (D.C. Cir. 2008) .....	54
<i>Palisades Gen. Hosp. v. Leavitt</i> , 426 F.3d 400 (D.C. Cir. 2005) .....	62
<i>Thompson v. Clark</i> , 741 F.2d 401 (D.C. Cir. 1984) .....	49

**Statutes**

42 U.S.C. §§ 7401-7671q .....	4
42 U.S.C. § 7407(d) .....	5, 6, 49, 54
42 U.S.C. § 7407(d)(1).....	28
42 U.S.C. § 7407(d)(1)(A).....	5
42 U.S.C. § 7407(d)(1)(A)(i) .....	4, 7, 15, 42, 45
42 U.S.C. § 7407(d)(1)(A)(ii) .....	4
42 U.S.C. § 7407(d)(1)(A)(iii).....	4
42 U.S.C. § 7407(d)(1)(B)(i) .....	7
42 U.S.C. § 7407(d)(1)(B)(ii) .....	5, 27, 28, 36, 60
42 U.S.C. § 7407(d)(2)(B) .....	5
42 U.S.C. § 7408 .....	4
42 U.S.C. § 7409 .....	4
42 U.S.C. § 7409(d) .....	4
42 U.S.C. § 7410(a) .....	5
42 U.S.C. § 7410(a)(2)(B) .....	4
42 U.S.C. § 7410(a)(2)(D)(i) .....	53
42 U.S.C. § 7410(a)(2)(D)(i)(I) .....	53
42 U.S.C. § 7471 .....	5
42 U.S.C. §§ 7502(c)(1).....	5

42 U.S.C. §§ 7502(c)(5).....	5
42 U.S.C. §§ 7506(c) .....	62
42 U.S.C. § 7511(a)(1).....	62
42 U.S.C. § 7511a .....	54
42 U.S.C. § 7511a(a)(2)(C).....	5, 62
42 U.S.C. § 7511a(a)(3).....	62
42 U.S.C. § 7511a(h) .....	54
42 U.S.C. § 7511a(h)(2).....	54
42 U.S.C. § 7607(b)(1).....	2
42 U.S.C. § 7607(d)(1).....	2
42 U.S.C. § 7607(d)(7)(B) .....	2
42 U.S.C. § 7619(a)(2).....	4
 <b>Code of Federal Regulations</b>	
40 C.F.R. pt. 50 .....	9
40 C.F.R. § 50.19 .....	4
40 C.F.R. § 51.1303 .....	62
40 C.F.R. pt. 58 .....	4



**Federal Registers**

56 Fed. Reg. 56,694 (Nov. 6, 1991) .....	45
69 Fed. Reg. 23,858 (Apr. 30, 2004) .....	44, 45
80 Fed. Reg. 65,292 (Oct. 26, 2015).....	6, 10
82 Fed. Reg. 54,232 (Nov. 16, 2017).....	6, 7
82 Fed. Reg. 9142 (Feb. 3, 2017) .....	53
83 Fed. Reg. 25,776 (June 4, 2018) .....	6, 7, 42
83 Fed. Reg. 35,136 (July 25, 2018).....	7

**Rules**

D.C. Cir. R. 15(c)(2) .....	14, 17
D.C. Cir. R. 28(a)(7) .....	14, 17

**GLOSSARY**

Br.	Petitioners' Joint Opening Brief
EPA	U.S. Environmental Protection Agency
Guidance	Memorandum on Area Designations for the 2015 Ozone National Ambient Air Quality Standards (Feb. 25, 2016)
JA	Joint Appendix
NO <sub>x</sub>	Nitrogen oxides
Response to Comments	Responses to Significant Comments on the State and Tribal Designation Recommendations for the 2015 Ozone National Ambient Air Quality Standards (Apr. 2018)
VOC	Volatile organic compounds

## INTRODUCTION

Perhaps no agency action commands more judicial deference than EPA's decisions about whether to designate an area as attaining federal air-quality standards.

Those decisions, made under the Clean Air Act, compel this Court's "extreme" deference for good reason. *Miss. Comm'n on Env'tl. Quality v. EPA*, 790 F.3d 138, 150 (D.C. Cir. 2015) (internal quotation marks omitted). They call on EPA's technical expertise not only in the complex science of pollutant formation (here, ozone), but also in the equally complex science of pollutant transport and dispersion.

And that is not all. Faced with voluminous emissions data, sophisticated modeling, and other information, EPA has to decide, for each area it designates, exactly where to draw the boundary between attainment and nonattainment. That in turn requires the agency to analyze all the evidence holistically, often making tough judgment calls about where the weight of that evidence falls.

Recognizing that Congress entrusted these technical decisions to EPA, this Court has long reviewed designations with the greatest deference. To prevail, a challenger must show that the agency weighed the evidence inconsistently or so erroneously that its conclusions are arbitrary and capricious.

Here, environmental groups and state and local governments petition for review of a smattering of EPA's ozone designations across the Midwest and Southwest. Their collective bottom line is that EPA should have designated larger nonattainment areas. But Petitioners have not shown standing for all their challenges. Even if they have standing, because they focus on only a few aspects of EPA's holistic analysis, Petitioners cannot show that the agency misjudged the overall weight of the evidence. The Court should deny the petitions.

### **STATEMENT OF JURISDICTION**

As Argument Section I shows, no Petitioner has established standing for seven of the challenged designations. If, however, this Court concludes that Petitioners have standing, then it would have jurisdiction to review the petitions under 42 U.S.C. § 7607(b)(1).<sup>1</sup>

### **ISSUES PRESENTED**

1. Some Petitioners base standing solely on members who spend time in areas that meet the ozone standards. Have they shown an injury that is traceable to EPA and redressable?

---

<sup>1</sup> Petitioners are wrong that 42 U.S.C. § 7607(d)(7)(B) also gives the Court jurisdiction. Br. at 1. That provision addresses the scope of judicial review and administrative reconsideration of actions subject to Section 7607(d). It does not apply here because (1) designations are not among the enumerated actions subject to Section 7607(d), and (2) the Administrator did not determine that Section 7607(d) applies to designations. *See* 42 U.S.C. § 7607(d)(1).

2. Only the United States can represent its citizens in federal matters. The state and local governments challenge EPA's designations in the name of protecting their residents. Do these Petitioners have standing?
3. To determine whether an area attains ozone standards, EPA uses a holistic, weight-of-the-evidence analysis. Because that analysis calls on the agency's technical expertise, this Court reviews EPA's conclusions with extreme deference. The question on the merits is whether EPA reasonably weighed the evidence in designating these counties:
  - Lake County, Indiana
  - Jefferson County, Missouri
  - Monroe County, Illinois
  - Sheboygan County, Wisconsin
  - Door County, Wisconsin
  - Ottawa County, Michigan
  - Weld County, Colorado<sup>2</sup>

## STATUTES AND REGULATIONS

Pertinent statutes and regulations not included in the addendum to Petitioners' brief are in the addendum at the end of this brief.

---

<sup>2</sup> Petitioners also challenge other designations for which EPA seeks remand without vacatur. *See infra* Argument § VIII.

## STATEMENT OF THE CASE

### I. The designation process under the Clean Air Act

The Clean Air Act, 42 U.S.C. §§ 7401-7671q, creates a comprehensive national program to address air pollution. To that end, the Act directs EPA to set national ambient air-quality standards for pollutants that may reasonably be anticipated to endanger the public. 42 U.S.C. §§ 7408-09. Ozone is one such pollutant. It has both a primary standard (set at a level to protect public health) and a secondary standard (set at a level to protect public welfare). *Id.* § 7409(b); 40 C.F.R. § 50.19. EPA periodically revises its standards to ensure that they give the necessary protection. 42 U.S.C. § 7409(d).

What happens next—determining whether air quality across the country meets those standards—is what this case is all about. In making that determination, EPA generally reviews data from a national network of state and local air monitors. *Id.* §§ 7619(a)(2), 7410(a)(2)(B); 40 C.F.R. pt. 58. An area that does not meet the standards, or that “contributes” to a violation in a “nearby” area, is designated “nonattainment.” 42 U.S.C. § 7407(d)(1)(A)(i). An area that meets the standards is designated “attainment.” *Id.* § 7407(d)(1)(A)(ii). And an area “that cannot be classified on the basis of available information” is designated “unclassifiable.” *Id.* § 7407(d)(1)(A)(iii).

The Act prescribes a process for EPA to make designations. *Id.* § 7407(d). That process, true to the Act’s cooperative-federalism ethos, is a collaborative effort between EPA and states. *Miss. Comm’n*, 790 F.3d at 145, 156. It begins with states recommending designations for areas within their borders. 42 U.S.C. § 7407(d)(1)(A). EPA may modify the recommendations as it “deems necessary,” but must give the state 120 days to show that a proposed modification is “inappropriate.” *Id.* § 7407(d)(1)(B)(ii). In addition, Section 7407(d)(2)(B) of the Act excludes the designation process from the Administrative Procedure Act’s public-comment requirement. But nothing in that provision “shall be construed as precluding such public notice and comment whenever possible.” *Id.* § 7407(d)(2)(B).

Under the Clean Air Act, all states must adopt (with EPA’s approval) implementation plans to attain, maintain, and enforce the standards in their areas. *Id.* § 7410(a). For attainment and unclassifiable areas, plans must include measures to, among other things, “prevent significant deterioration of air quality.” *Id.* § 7471. “For nonattainment areas, however, the Act imposes more stringent requirements,” *Miss. Comm’n*, 790 F.3d at 146, such as deadlines to reach attainment and certain permitting requirements for the area’s new or modified major stationary sources. 42 U.S.C. §§ 7502(c)(1) & (5), 7511a(a)(2)(C).

## II. Designating for the 2015 ozone standards.

Though “an essential presence in the atmosphere’s stratosphere layer,” ozone is harmful at ground level. *Miss. Comm’n*, 790 F.3d at 147; *see* 83 Fed. Reg. 25,776, 25,777/3 (June 4, 2018). There, it can cause respiratory problems in humans and damage vegetation. 83 Fed. Reg. at 25,778/1. Ground-level ozone is not typically emitted directly into the air. *Am. Petroleum Inst. v. Costle*, 665 F.2d 1176, 1181 (D.C. Cir. 1981). It forms when ozone precursors—nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC)—react in the atmosphere with sunlight. 83 Fed. Reg. at 25,777/3. Wind can carry ozone and its precursors far away, complicating the regulation of ozone pollution. *Id.*

In 2015 EPA made the primary and secondary ozone standards more stringent, lowering their levels to 0.070 parts per million. 80 Fed. Reg. 65,292 (Oct. 26, 2015).<sup>3</sup> That revision triggered EPA’s duty to designate areas for those standards. 42 U.S.C. § 7407(d). After states submitted recommendations, in late 2017 EPA finalized designations for some 85 percent of the country. 82 Fed. Reg. 54,232 (Nov. 16, 2017); 83 Fed. Reg. at 25,779/1. For most of the remaining

---

<sup>3</sup> A petition for review of those standards is pending in this Court. *See Murray Energy Corp. v. EPA*, No. 15-1385 (consolidated with Nos. 15-1392, 15-1490, 15-1491, and 15-1494).



areas, including all those disputed here, EPA finalized designations in April 2018.<sup>4</sup> 83 Fed. Reg. at 25,783/3. In this process, EPA gave states 120 days to show why a proposed modification is inappropriate. *Id.* at 25,779/2. The agency (though not required to) also gave the public 30 days to comment. *Id.*

All told, EPA issued over 3000 designations for the 2015 ozone standards. *Id.* at 25,779/1-2; 82 Fed. Reg. at 54,232; 83 Fed. Reg. 35,136 (July 25, 2018). What is more, the agency had to make these designations as expeditiously as possible to meet statutory and judicial deadlines. 42 U.S.C. § 7407(d)(1)(B)(i); *In re Ozone Designation Litig.*, 286 F. Supp. 3d 1082, 1091 (N.D. Cal. 2018).

### **III. A primer on how EPA draws nonattainment boundaries**

As explained earlier, a nonattainment area is one that either (1) violates the standard, or (2) “contributes” to a “nearby” area’s violation. 42 U.S.C. § 7407(d)(1)(A)(i). Because ozone and its precursors are pervasive and easily blown from place to place, deciding where nonattainment boundaries lie is a difficult task—both in the technical demands of the analysis and in the judgment calls about exactly where to draw the boundary. Guidance at 5, JA\_\_\_\_.

---

<sup>4</sup> About three months later, EPA finalized designations for the rest of the remaining areas (eight counties in the San Antonio area). 83 Fed. Reg. 35,136 (July 25, 2018). Petitioner Sierra Club and Intervenor Texas Commission on Environmental Quality are currently challenging those designations in the Fifth Circuit. *See State of Texas v. EPA*, No. 18-60606 (5th Cir.); *Sierra Club v. EPA*, No. 18-1262 (D.C. Cir.) (transferring case to Fifth Circuit).

To delineate nonattainment areas, EPA has long used a holistic, weight-of-the-evidence analysis. *Id.*, Att. 3 at 3-11, JA\_\_\_\_-\_\_\_\_; *see Miss. Comm’n*, 790 F.3d at 149-50 (ozone) (approving this analysis); *see also Catawba Cty., N.C. v. EPA*, 571 F.3d 20, 39 (D.C. Cir. 2009) (particulate matter); *ATK Launch Sys., Inc. v. EPA*, 669 F.3d 330, 336 (D.C. Cir. 2012) (same). For each violation, EPA determines its area of analysis and applies the holistic analysis to that area. The area of analysis generally consists of a federally delineated statistical area that spans one or more counties. Guidance at 3-4, JA\_\_\_\_-\_\_\_\_. In regulatory parlance, the statistical area is known as the Combined Statistical Area or the Core Based Statistical Area, as the case may be. *Id.* at 5, JA\_\_\_\_. They are delineated by the Office of Management and Budget based on size, and economic and social integration. *Id.* at 5-6, JA\_\_\_\_-\_\_\_\_; *Miss. Comm’n*, 790 F.3d at 147 & n.3.

A case-specific analysis may support designating as nonattainment anything from part of a county to the entire area of analysis. Guidance, Att. 3 at 7, JA\_\_\_\_. The key is to include areas that violate the standard and nearby areas that contribute to the violation. EPA’s holistic analysis considers five factors when examining state recommendations:<sup>5</sup>

---

<sup>5</sup> EPA can also “identify and evaluate other relevant information or circumstances specific to a particular area . . . .” Guidance at 6, JA\_\_\_\_.

1. *Air-quality data.* Whether an area violates a standard depends on data from air monitors—or, more precisely, on a statistic calculated from that data, called the design value. Monitors record hourly ozone concentrations over the course of the day. For the ozone standards, to get a monitor’s design value, you take each year’s fourth-highest daily maximum 8-hour concentration, and average them over three consecutive years. *See* 40 C.F.R. pt. 50, App. U (detailing this process, including how to calculate the daily maximum concentration). Violation of a standard occurs if the design value is higher than the standard. If the daily maximum concentration itself is higher than the standard, that is called an exceedance.

In designating for the 2015 standards, the agency reviewed the most recent three years of quality-assured, certified monitoring data. Guidance, Att. 3 at 5, JA\_\_\_\_. This typically meant 2014-2016 data, though sometimes states certified their 2017 monitoring data in time for the agency to designate using 2015-2017 data. *See id.*; St. Louis, MO-IL Nonattainment Area: Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (St. Louis Final Designations) at 7, JA\_\_\_\_.

2. *Emissions and related metrics.* NO<sub>x</sub> and VOC emissions are “important factors” in assessing an area’s potential contribution to nearby violations. Guidance, Att. 3 at 5, JA\_\_\_\_. EPA thus considers an area’s total emissions and

locations of stationary point sources such as power plants. *Id.* Because mobile sources like cars also emit NO<sub>x</sub> and VOC, an area's traffic volume and commuting patterns are likewise part of the analysis. *Id.* at 6-7, JA\_\_\_\_-\_\_\_\_. So is data on population and urbanization, which can give context to the area's emissions data. *Id.* at 6, JA\_\_\_\_.<sup>6</sup>

3. *Meteorology.* Because wind and other weather conditions can transport emissions elsewhere, meteorology can help identify potential contributors. *Id.* at 7, JA\_\_\_\_. The main analytical tool EPA used here is a sophisticated model<sup>7</sup> that maps the 24-hour trajectories of air parcels at various altitudes before they reach a violating monitor on days when it records an exceedance. *Id.* at 7-10, JA\_\_\_\_-\_\_\_\_. In other words, for each exceedance day at a violating monitor, the model shows where wind was coming from. Importantly, the model does *not* show whether the wind encountered and transported any emissions to the monitor. *See id.* at 8, JA\_\_\_\_ (cautioning that trajectories “alone do not conclusively indicate

---

<sup>6</sup> For simplicity, the rest of this brief uses “emissions” to mean the precursors NO<sub>x</sub> and VOC, as well as any ozone formed from them. Note too that emissions here are described as a percentage of anthropogenic emissions in the relevant areas. But many areas also have significant non-anthropogenic emissions. *See* 80 Fed. Reg. at 65,300 (“[ozone] concentrations in some locations in the U.S. on some days can be substantially influenced by sources”—including “natural sources”—“that cannot be addressed by domestic control measures.”).

<sup>7</sup> Or, to give its full name, the HYbrid Single-Particle Lagrangian Integrated Trajectory modeling system, known as HYSPLIT. Guidance, Att. 3 at 7, JA\_\_\_\_.

contribution”). That is why EPA has to consider modeled trajectories together with other factors when analyzing an area for contribution.

4. *Geography and topography.* The lay of the land—mountains, lakes, valleys, and the like—may affect wind patterns and emissions transport. *Id.* at 10, JA\_\_\_\_. An area’s physical features can thus inform EPA’s contribution analysis.

5. *Jurisdictional boundaries.* Existing jurisdictional boundaries, like county lines and past nonattainment areas, can help EPA draw nonattainment areas in a way that allows states to enforce their implementation plans. *Id.* If existing boundaries are inadequate, EPA can use other markers such as geographic coordinates. *Id.*

\* \* \*

This being a holistic analysis, each designation is intensely fact-driven. No one factor is dispositive and, depending on the particulars of each case, some factors may be more salient than others. Ultimately, the holistic approach requires EPA to consider a wide range of information and then decide where the weight of the evidence falls.<sup>8</sup>

---

<sup>8</sup> EPA has made a number of statements about its general approach to designations. *See, e.g.*, Response to Comments at 6, JA\_\_\_\_ (“The phenomenon of ozone transport must be balanced against the need to have smaller areas that can focus on local control measures.”); *id.* at 72, JA\_\_\_\_ (“the boundaries for a nonattainment area of the 2015 ozone [standards] need not be identical to the boundaries for the 2008 ozone [standards] and [in some cases] EPA has agreed with state

*Cont.*

## STANDARD OF REVIEW

This Court reviews EPA's designations "under the same standard we use in reviewing a challenge brought under the Administrative Procedure Act[.]" *Miss. Comm'n*, 790 F.3d at 150. That is, the Court can set aside designations only if they are arbitrary or capricious. *Id.* It gives "an extreme degree of deference" to EPA's evaluation of scientific data within its area of expertise, especially when, as here, the agency is administering complicated provisions of the Clean Air Act. *Id.* (internal quotation marks omitted). So the question for the Court is not whether it or anyone else "[l]ooking at the same data . . . would simply reach a different conclusion." *Id.* at 162. It is whether EPA "considered all relevant factors and articulated a rational connection between the facts found and the choice made." *Id.* at 150 (internal quotation marks omitted). The Court will "uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned." *Catawba*, 571 F.3d at 50 (internal quotation marks omitted).

In addition, this Court has long upheld EPA's "holistic, multi-factor, weight-of-the-evidence test for determining whether a given area contributes to a . . . violation." *Miss. Comm'n*, 790 F.3d at 150. EPA acts arbitrarily if it applies the holistic analysis "inconsistently, resulting in similar counties being treated

---

recommendations to designate a different, typically smaller, area as nonattainment for the 2015 ozone [standards].").

dissimilarly,” or “so erroneously in a particular case that it could not have reasonably” reached the conclusion it did. *Catawba*, 571 F.3d at 40.

### **SUMMARY OF ARGUMENT**

This Court must have jurisdiction to review each challenged designation. Because no Petitioner has shown standing for some of those designations, the Court is powerless to review them.

On the merits, EPA properly made the seven designations briefed here. In each holistic analysis, EPA considered the relevant factors, weighed all the evidence, and reasonably delineated the nonattainment area.

Petitioners have not shown, as they must, that EPA applied its holistic analysis either inconsistently or erroneously. That is because when not simply misreading the record, Petitioners focus on just a few pieces of evidence to the exclusion of the rest. It is a recipe for failure when the question before the Court is whether EPA reasonably weighed *all* the evidence. At best, Petitioners have shown only that they disagree with EPA’s conclusions. But that is no reason for this Court to second-guess EPA’s judgments on the technical matters Congress left to the agency. The Court should deny the petitions for the seven designations. It should remand the remaining disputed designations to EPA without vacatur.

## ARGUMENT

### **I. Petitioners have not shown standing for certain designations.**

Article III of the Constitution “limits the jurisdiction of federal courts to ‘Cases’ and ‘Controversies’ . . . .” *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 559 (1992). For that reason, Petitioners must establish standing for each designation they challenge. *See City of Boston Delegation v. FERC*, 897 F.3d 241, 250 (D.C. Cir. 2018) (requiring standing for each claim). To do so, Petitioners must show an injury in fact that is both fairly traceable to EPA’s designation and redressable. *See Lujan*, 504 U.S. at 560-61. For those who are not the object of the challenged designations, “standing is not precluded, but it is ordinarily substantially more difficult to establish.” *Id.* at 562 (internal quotation marks omitted).

Because their standing is not obvious from the record, Petitioners must show standing in their docketing statements and opening brief. D.C. Cir. R. 15(c)(2), 28(a)(7). No Petitioner has done so for El Paso County, Texas; Door County, Wisconsin; Kenosha County, Wisconsin; Lake County, Indiana; McHenry County, Illinois; Monroe County, Illinois; and Porter County, Indiana. Petitioners’ failure is twofold.

First, the environmental groups cannot establish standing by relying on members in areas that comply with the ozone standards. *See Br.* at 44 (discussing



members in areas that “EPA failed to designate nonattainment”). Under the Clean Air Act, a nonattainment area need not itself violate the standards; it can also be designated as such if it contributes to a nearby violation. 42 U.S.C.

§ 7407(d)(1)(A)(i). Many allegedly contributing areas here have monitors that meet the ozone standards. *See, e.g.,* Chicago, IL-IN-WI Nonattainment Area: Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (Chicago Final Designations) at 9, JA\_\_\_\_ (Lake, McHenry, and Porter). Yet Petitioners do not explain how spending time in those complying areas could expose their members to the “high levels of ozone” that they say harm them. Br. at 45.<sup>9</sup> In these instances, then, Petitioners have not shown an injury, much less one that is traceable to EPA’s action and redressable.

Second, the state and local governments have no *parens patriae* standing. They claim standing on account of harm *not* to their own interests, but to their residents’. *See id.* at 46 (“Illinois and Chicago residents will be adversely impacted by ozone and ozone precursors emitted in areas that EPA improperly designated attainment.”); *id.* at 47 (“The City of Sunland Park . . . will suffer

---

<sup>9</sup> The environmental groups also mention members who are injured from spending time in “parts of the country neighboring” areas that EPA did not designate nonattainment. Br. at 44. It is not at all clear whether the quoted language means (1) allegedly contributing areas, or (2) places that abut areas that should have been designated nonattainment (whether as violators or contributors). Either way, Petitioners have not shown how being in these “neighboring” areas could expose their members to “high levels of ozone.” *Id.* at 45.

concrete injuries as a result of EPA's failure to adequately protect the City's residents against ozone pollution."). That theory runs smack into the "prohibit[ion]" against "a sovereign . . . bringing an action to protect its citizens from the operation of federal statutes." *Ctr. for Biological Diversity v. U.S. Dep't of Interior*, 563 F.3d 466, 477 (D.C. Cir. 2009) (citing *Massachusetts v. EPA*, 549 U.S. 497, 520 n.17 (2007) (majority op.), *id.* at 539 (Roberts, C.J., dissenting)); *see Alfred L. Snapp & Sons, Inc. v. Puerto Rico ex rel Barez*, 458 U.S. 592, 610 n.16 (1982) ("A State does not have standing as *parens patriae* to bring an action against the Federal Government."). "As the Court has long recognized, only the United States . . . may represent its citizens and ensure their protection under federal law in federal matters." *Ctr. for Biological Diversity*, 563 F.3d at 477. EPA's designations under the Clean Air Act are federal matters under federal law. So state and local governments have no standing to challenge designations in the name of protecting their residents.

The two cases Petitioners cite do not save them. *See* Br. at 46. In *Georgia v. Tennessee Copper Company*, the state was not challenging a federal action. *See* 206 U.S. 230, 237 (1907). And in *Massachusetts v. EPA*, "it was critical that Massachusetts sought to assert *its own rights* as a state under the Clean Air Act, and was not seeking to protect the rights of its citizens under the Clean Air Act."

*Ctr. for Biological Diversity*, 563 F.3d at 476 (citing 549 U.S. at 520 n.17)

(emphasis added).

Petitioners, in short, have not shown standing when basing it solely on (1) a member's presence in an allegedly contributing area, or (2) *parens patriae*. Here are the seven designations for which no Petitioner has standing and over which this Court has no jurisdiction:<sup>10</sup>

Designation	Petitioners bringing challenge	Petitioners' basis for standing
El Paso County, Texas	City of Sunland Park	<i>Parens patriae</i>
	Familias Unidas del Chamizal	Member presence in allegedly contributing area (Azutlan, Quevedo, and Villegas Decls.)
	Sierra Club	No declaration
Door County, Wisconsin	Clean Wisconsin	Member presence in allegedly contributing area (Leline Decl.)
Kenosha County, Wisconsin	Illinois and Chicago	<i>Parens patriae</i>
	Clean Wisconsin	Member presence in allegedly contributing area (Antaramin Decl.)
	Environmental Law and Policy Center	No declaration
	Respiratory Health Association	No declaration
Lake County, Indiana	Illinois and Chicago	<i>Parens patriae</i>
	Environmental Law and Policy Center	No declaration

<sup>10</sup> Because Petitioners' brief does not say who is challenging each designation, we rely on the docketing statements and non-binding statements of issues. As the chart shows, some Petitioners made no effort whatsoever to establish standing for a particular designation. The Court should not bless their disregard for its rules by allowing them to submit declarations on reply. See D.C. Cir. R. 15(c)(2), 28(a)(7).

	Respiratory Health Association	No declaration
McHenry County, Illinois	Illinois and Chicago	<i>Parens patriae</i>
	Environmental Law and Policy Center	No declaration
	Respiratory Health Association	Member presence in allegedly contributing area (Schindler Decl.)
Monroe County, Illinois	Illinois and Chicago	<i>Parens patriae</i>
	Environmental Law and Policy Center	No declaration
	Respiratory Health Association	No declaration
Porter County, Indiana	Illinois and Chicago	<i>Parens patriae</i>
	Environmental Law and Policy Center	Member presence in allegedly contributing area (Read Decl.)
	Respiratory Health Association	No declaration

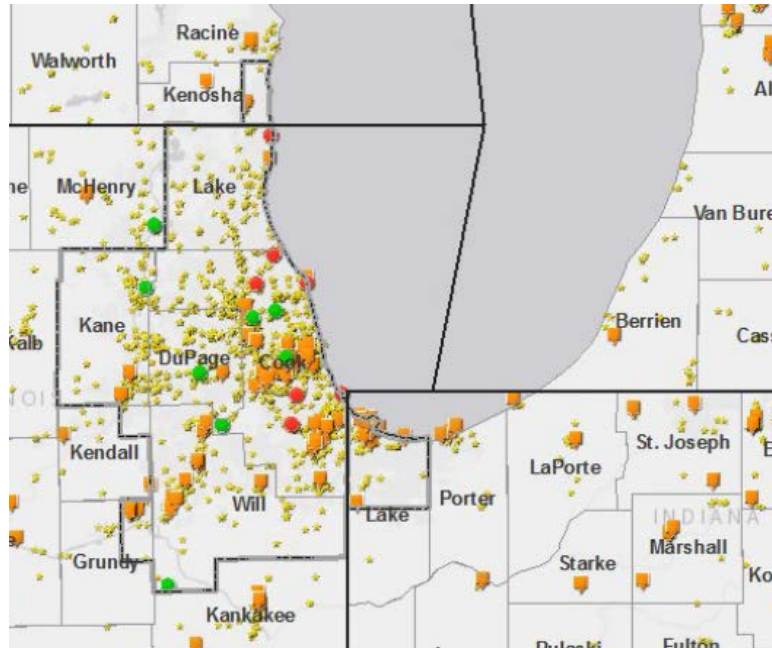
**II. EPA reasonably designated nonattainment the half of Lake County, Indiana that generates almost all county emissions.**

Lake County, Indiana<sup>11</sup> is part of EPA's area of analysis for the Chicago region, home of six violating monitors. *See* Chicago Final Designations at 6-9, JA\_\_\_\_-\_\_\_\_. Though none of those monitors are in Lake, EPA initially included the entire county in the nonattainment area for contributing to the violations. *Id.*; Chicago, IL-IN-WI Nonattainment Area: Intended Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document at 2, JA\_\_\_\_. But in its final designations EPA, partially accommodating Indiana (which

---

<sup>11</sup> Not to be confused with Lake County, Illinois, also in the same area of analysis. *See* Chicago Final Designations at 6, JA\_\_\_\_.

recommended attainment), designated five Lake townships—or roughly half the county’s geographic area—nonattainment (again for contributing):



Chicago Final Designations at 12, JA\_\_\_\_ (showing violating monitors in red, and large and small sources in orange and yellow; and outlining nonattainment area in black dash marks);<sup>12</sup> *see id.* at 2, 25, JA\_\_\_\_, \_\_\_\_\_. Lake’s nonattainment area, EPA explained, covers almost all the county’s emissions from point sources: 98 percent of NO<sub>x</sub> and 99 percent of VOC, along with 88 percent of Lake’s population. *Id.* at 25, JA\_\_\_\_\_.

Petitioners exaggerate that “only a small portion of Lake County” was designated nonattainment. Br. at 13; *see id.* at 54 (describing “most of Lake

---

<sup>12</sup> The violating monitors have design values ranging from 0.071 to 0.077 parts per million. Chicago Final Designations at 8-9, JA\_\_\_\_-\_\_\_\_\_.

County” as outside the nonattainment area). They then attack EPA’s “unexplained change” between the initial nonattainment area (which included all of Lake) and the final nonattainment area (which does not). Br. at 55; *see id.* at 52-59. That accusation has no basis in the record. EPA specifically explained that the final nonattainment area covers almost all Lake’s emissions. *See Chicago Final Designations* at 25, JA\_\_\_\_. For that reason, there was no material change between the initial and final nonattainment areas. Nor did the final designation omit areas in Lake that contribute to air quality at the violating monitors. *See Br.* at 53-56.

Petitioners next argue that EPA treated genuinely similar counties differently. *Id.* at 57-58; *see Miss. Comm’n*, 790 F.3d at 169 (explaining that unjustified disparate treatment is arbitrary and capricious). But the comparison they offer, Illinois’s Kane County, shows no disparate treatment. Whereas point sources are scattered across Kane, they are clustered in the northern part of Lake. *See Chicago Final Designations* at 12, JA\_\_\_\_. So it was reasonable for EPA to include all of Kane but only the northern half of Lake in the nonattainment area. The Court should uphold Lake’s designation.

### **III. EPA reasonably designated the St. Louis nonattainment area.**

#### **A. EPA revised its initial analysis of Jefferson County, Missouri after seeing updated data that shows improved air quality.**

Missouri’s Jefferson County is in the area of analysis for the St. Louis region. EPA designated a nonattainment area that covers four entire counties, the

City of St. Louis, and part of Franklin County, Missouri. St. Louis Final Designations at 2, JA\_\_\_\_. The final nonattainment area excludes Jefferson (as recommended by Missouri). *Id.*

The record shows how EPA delineated that area. In its initial analysis, EPA used 2014-2016 data, the most recent available at the time. *See* St. Louis, MO-IL Nonattainment Area: Intended Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (St. Louis Intended Designations) at 6, JA\_\_\_\_. This data showed five violating monitors in the area of analysis (though none were in Jefferson). *See id.* at 7, JA\_\_\_\_. Reviewing that information and other factors in its holistic analysis, EPA included Jefferson in the initial nonattainment area. *Id.* at 2, JA\_\_\_\_.

Both Missouri and Illinois then timely submitted certified 2017 data, thus allowing EPA to use 2015-2017 data to make final designations. St. Louis Final Designations at 7, JA\_\_\_\_. By then, much had changed. The 2015-2017 data showed only one violating monitor, in St. Charles County, Missouri. *Id.* at 8, JA\_\_\_\_. This meant that EPA had to model trajectories for just one monitor instead of five, which resulted in fewer total trajectories crossing Jefferson. *Compare id.* at 18, JA\_\_\_\_, *with* St. Louis Intended Designations at 16-20, JA\_\_\_\_-\_\_\_\_. Crucially, among the monitors no longer in violation was the one closest to Jefferson. *Compare* St. Louis Intended Designations at 5, JA\_\_\_\_ (showing

violating monitor in St. Louis County), *with* St. Louis Final Designations at 6, JA\_\_\_\_ (showing same monitor as complying). That is, Jefferson was now farther away from any violating monitors than it had been before.

In making final designations, then, EPA had updated data showing improved air quality. And given that the number of violating monitors had plunged by 80 percent, the geographic area that contributes to the violation also became a lot smaller. That in turn shifted the weight of evidence in EPA’s contribution analysis for Jefferson. *Cf. Catawba*, 571 F.3d at 47 (explaining that new data can lead EPA to interpret existing information differently). Under these circumstances, EPA reasonably excluded Jefferson—now farther away from the sole violating monitor—from the nonattainment area. *See* St. Louis Final Designations at 27, JA\_\_\_\_ (“the most significant point sources in Jefferson County are in the southern half of the county, further away from the violating monitor”); *id.* at 11, JA\_\_\_\_ (describing Jefferson as “more distant”). That is a “rational” basis for EPA’s designation, and the Court should uphold it. *Miss. Comm’n*, 790 F.3d at 150.

Petitioners offer three reasons why EPA acted arbitrarily. But the record debunks every argument.

**1. Petitioners ignore the updated data.**

Petitioners accuse EPA of making a “180-degree change” on Jefferson “with no change in the underlying data.” Br. at 104, 106. In particular, they latch onto



EPA's observation in the final designation about Jefferson being "distant" from the violating monitor. *Id.* at 105; *see* St. Louis Final Designations at 11-12, JA\_\_\_\_ - \_\_\_\_\_. Because EPA did not initially describe Jefferson as "distant," Petitioners say, it had no good reason to do so in the final designation. *See* Br. at 105-06.

In fact, there was a very good reason. As detailed above, updated data showed far fewer violating monitors. So not only was EPA factually correct about Jefferson's greater distance from the now-closest violating monitor, but when weighing the evidence, EPA also properly relied on all certified data available at the time of the designation. And based on the evidence, EPA reasonably determined that Jefferson is not contributing to air quality at the region's only violating monitor. This Court should not repeat Petitioners' error of ignoring updated data timely submitted by the states.

**2. EPA treated Jefferson and Franklin Counties differently because they are different.**

Thinking that they have found an example of disparate treatment, Petitioners point to Franklin County, which abuts St. Charles County (home of the region's sole violating monitor). *See* Br. at 97-103. Compared with Franklin, they say, Jefferson "was a greater contributor to ozone pollution in the area . . . ." *Id.* at 102.

This comparison glosses over differences. The only part of Franklin designated nonattainment is a township that is home to a large point source that produces most of Franklin's NO<sub>x</sub> emissions. St. Louis Final Designations at 11,

27, JA\_\_\_\_, \_\_\_\_\_. That source is just 39 miles away from the violating monitor—closer than Jefferson’s two largest point sources, which are 48 and 51 miles away. *See* Br. at 101. Though Petitioners are happy to wave away that difference as immaterial, EPA chose not to. *See id.*; St. Louis Final Designations at 11, 27, JA\_\_\_\_, \_\_\_\_\_. That is a reasonable judgment call, one that the Court should “not . . . second-guess[.]” *Miss. Comm’n*, 790 F.3d at 162.

### **3. Petitioners misconstrue EPA’s holistic analysis.**

Petitioners also blame EPA for “accept[ing] Missouri’s cherry-picked use of back trajectories on only three of seventeen [exceedance] days . . .” Br. at 97-98. In essence, they imply that EPA ignored trajectories on the other days. *See id.* at 95, 97-104. The record shows that EPA did no such thing.

After EPA notified Missouri of the initial nonattainment area, the state submitted more meteorological analysis. St. Louis Final Designations at 22, JA\_\_\_\_. The analysis focused on three days with the highest exceedances at the violating monitor. *Id.* Missouri concluded from its analysis that ozone concentrations there “are mostly . . . a result of stagnant air in the area,” indicating that ozone is mostly attributable to sources in the immediate vicinity, with other counties, including Jefferson, “hav[ing] little effect.” Missouri Dep’t of Natural Resources, Revision to Area Boundary Designation Recommendation for the 2015 Ozone Standard (Feb. 16, 2018), at 22-23, JA\_\_\_\_-\_\_\_\_.

Missouri's analysis was unquestionably one piece of evidence that EPA weighed. *See* St. Louis Final Designations at 22, 27, JA\_\_\_\_, \_\_\_\_\_. But it was not, as Petitioners urge, the only meteorological evidence that EPA weighed. After discussing Missouri's analysis, EPA—in the very next sentence—said that “the other 14 days in 2015-2017 with ozone above the level of the [standards] should also be assessed and given appropriate weight.” *Id.* at 23, JA\_\_\_\_.<sup>13</sup> And EPA did so, as evidenced by a map showing modeled trajectories—for all 17 exceedance days and at three different altitudes—in the final designation. *Id.* at 18, JA\_\_\_\_. The agency did not cherry-pick data.

Nor are Petitioners right that EPA's trajectory modeling “clearly demonstrate[s]” that Jefferson is a contributor. Br. at 95. Theirs is a common mistake in interpretation. The trajectories simply model where wind at the violating monitor came from on exceedance days. *See supra* Statement of the Case § III. They do not show whether wind picked up any emissions along the way, much less where those emissions came from. In other words, trajectories model wind, not pollution. Indeed, this limitation is why trajectory modeling is only one

---

<sup>13</sup> Petitioners dispute whether the St. Louis region had “ever-improving ozone air quality.” Br. at 95; *see id.* at 96. The record shows an overall decrease in design values at the violating monitor over the last decade. *See* St. Louis Final Designations at 9, JA\_\_\_\_.

factor that is weighed with others—and not the sole determinative factor—in the holistic analysis. *See* Guidance, Att. 3 at 8, JA\_\_\_\_.

Petitioners thus have not shown that EPA arbitrarily excluded Jefferson County from the St. Louis nonattainment area.

**B. EPA designated Monroe County, Illinois in light of updated data.**

Petitioners’ objection to Monroe County’s designation is equally flawed. *See* Br. at 93-94. Like Jefferson, Monroe (which has no violating monitor) was in the initial St. Louis nonattainment area. *See* St. Louis Intended Designations 2, 7, JA\_\_\_\_, \_\_\_\_\_. Like Jefferson, updated data showed that the violating monitor that had been closest to Monroe is now complying. *Compare id.* at 5, JA\_\_\_\_ (showing violating monitor in St. Louis County), *with* St. Louis Final Designations at 6, JA\_\_\_\_ (showing same monitor as complying). And like Jefferson, the updated data shifted the weight of the evidence, leading EPA to exclude Monroe from the final nonattainment area. *See* St. Louis Final Designations at 26, JA\_\_\_\_ (examining Monroe’s emissions and modeled trajectories but noting that those trajectories later pass through “much higher-emitting areas” that are “less distant” from the violating monitor). EPA thus acted reasonably on this record. And Petitioners are wrong that Monroe’s final designation is “based principally on the Messina Letter” sent to EPA during the designation process. Br. at 93.

Also wrong is the related contention that EPA denied Petitioner Illinois statutorily required notice.<sup>14</sup> *See id.* at 93, 50-52. Recall that the Act directs EPA to notify states and give them a chance to show why a proposed modification of their recommendations is “inappropriate.” 42 U.S.C. § 7407(d)(1)(B)(ii). In 2016 Illinois, through its environmental director Alec Messina, recommended nonattainment for Monroe. Letter from Alec Messina, Director, Illinois Env'tl. Protection Agency, to Robert A. Kaplan, Acting Regional Administrator, EPA (Sept. 30, 2016), JA\_\_\_\_-\_\_\_\_. Then in 2018, shortly before EPA finalized its designations, Mr. Messina sent the agency another letter—the so-called Messina Letter—noting a recent discussion he had had with EPA about “impending air quality designations for ozone . . . .” Letter from Alec Messina, Director, Illinois Env'tl. Protection Agency, to Scott Pruitt, Administrator, EPA (Apr. 26, 2018), JA\_\_\_\_. Mr. Messina went on to say that “it would seem appropriate to consider a designation of attainment” for two Illinois counties, including Monroe. *Id.*<sup>15</sup>

---

<sup>14</sup> If the Court concludes that Illinois lacks standing, *see* Argument § I, then it has no jurisdiction over this claim at all, for the other Petitioners can have no standing to vindicate Illinois’s claim.

<sup>15</sup> The letter also stated that “Illinois EPA would be comfortable in an approach to such designations that ensures national and regional consistency by considering the 2014 emissions data that evidences the county-by-county contributions of nitrogen oxides and volatile organic material.” Messina Letter, JA\_\_\_\_.

The Messina Letter thus revised the state’s recommendation for Monroe from nonattainment to attainment. After all, the state’s role in the designation process is to make recommendations for its own areas. *See* 42 U.S.C.

§ 7407(d)(1). So when Illinois wrote to EPA during the designation process about Monroe’s designation, the agency reasonably concluded that the state was revising its earlier recommendation. *See* St. Louis Final Designations at 2 n.3, JA\_\_\_\_. And because EPA’s final designation for Monroe (attainment) did not modify Illinois’s revised recommendation (also attainment), no notice was required under the Act.

Even if the Messina Letter were not a revised recommendation, deprivation of notice could not have possibly harmed Illinois. The point of notice is to give Illinois a chance to show that an attainment designation for Monroe is “inappropriate.” 42 U.S.C. § 7407(d)(1)(B)(ii). Yet having said the exact opposite—that attainment is “appropriate”—in the Messina Letter, surely Illinois had no need of that chance. *Cf. Air Transport Ass’n of Am. v. Civil Aeronautics Bd.*, 732 F.2d 219, 224 n.11 (D.C. Cir. 1984) (requiring plaintiffs alleging procedural violations to show prejudice).

Finally, Petitioners object to EPA’s conclusion that Monroe was “less likely” than other areas to contribute. Br. at 93. They demand certainty, and imply that *Catawba* champions their approach. *See id.* (citing 571 F.3d at 39).

Petitioners are mistaken. Weight-of-the-evidence analysis, by definition, admits of no certainty. Faced with evidence that can potentially support different conclusions, EPA must decide where the weight of that evidence falls, not do the impossible by erasing all doubt. And *Catawba* does not endorse Petitioners' theory. The Court there held that EPA's reading of the statutory term "contribute" was reasonable, not that contribution requires certainty. *See* 571 F.3d at 39.

Petitioners, in short, not only ignore updated data in EPA's analysis; they voice nothing more than disagreement with EPA's conclusion. That cannot justify second-guessing the agency's judgment. *See Miss. Comm'n*, 790 F.3d at 162.

**IV. Relying on Wisconsin's analysis, EPA properly designated part of Sheboygan County nonattainment.**

Sheboygan County lies on the western shores of Lake Michigan, north of Chicago and Milwaukee. It has two monitors, one by the shore (dubbed the lakeshore monitor), and the other 3.2 miles inland (dubbed the inland monitor). *See* Wisconsin Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (Wisconsin Final Designations) at 8, JA\_\_\_\_. Monitoring data showed a violation at the lakeshore monitor. *See id.* at 31, JA\_\_\_\_. EPA designated nonattainment a stretch of the county about 2.3 miles

wide along its lakefront, an area that covers the violating monitor and that aligns with Wisconsin's suggested designation.<sup>16</sup> *See id.* at 41, JA\_\_\_\_.

In making this designation, EPA applied its holistic analysis and considered Wisconsin's recommendation. *See id.* at 6-12, 28-42, JA\_\_\_\_-\_\_\_\_, \_\_\_\_-\_\_\_\_; *see generally* Wisconsin Dep't of Natural Resources, 2015 Ozone National Ambient Air Quality Standards Technical Support Document (Apr. 2017) (Wisconsin Rec.), JA\_\_\_\_-\_\_\_\_. The recommendation included a three-part analysis showing that (1) wind transports emissions over Lake Michigan from upwind sources to Sheboygan; (2) Sheboygan's own emissions have only a negligible effect on the violating lakeshore monitor's design value; and (3) for Wisconsin monitors near Lake Michigan, the farther inland they are, the lower their design values. We detail each part of the analysis below.<sup>17</sup>

1. *The lake-breeze effect.* By shaping local wind patterns, Lake Michigan plays a key role in emissions transport in the counties on its shores. Sheboygan County is no exception. First, some basic meteorology is in order. During the day, land heats up faster than water. Air over land, in turn, becomes warmer (and less

---

<sup>16</sup> Though Wisconsin recommended Sheboygan for attainment, it also suggested a nonattainment area for the county in case EPA disagreed with the recommendation. Wisconsin Final Designations at 35, JA\_\_\_\_.

<sup>17</sup> For simplicity we refer to this analysis, performed by the Lake Michigan Air Directors Consortium, as Wisconsin's analysis. Wisconsin Rec. at 15, JA\_\_\_\_.



dense) than air over water. As the warmer land air rises, colder, denser lake air moves in to fill the gap, creating a breeze blowing in from the lake. This is the lake breeze.<sup>18</sup> *See generally* Wisconsin Final Designations at 6, JA\_\_\_\_. It blows air that is over Lake Michigan—including emissions in that air from distant upwind sources—toward downwind monitors along the lake. *See id.*

Using meteorology data, satellite imaging, and data from Sheboygan’s two monitors, Wisconsin analyzed the penetration of lake breezes into Sheboygan County. *See id.* at 6-12, JA\_\_\_\_. The analysis showed that on days without lake breezes, both monitors had lower average ozone values. *See id.* at 10-11, JA\_\_\_\_-\_\_\_\_. On days with “shallow” lake breezes (when wind reached the lakeshore monitor but not the inland one), the lakeshore monitor had relatively high average ozone values compared with the inland monitor. *See id.* And on days with “deep” lake breezes (when wind reached both monitors), average ozone values at the inland monitor reached their peak, though still at levels lower than the lakeshore monitor. *See id.* Wisconsin reasoned that deep lake breezes carried ozone landward and, along the way, mixed with less ozone-rich land air, leaving the inland monitor with more diluted ozone concentrations than the lakeshore monitor.

---

<sup>18</sup> At night, the opposite happens, as land cools faster than water: Air over land is colder than air over the lake, so land air moves in to fill the gap left by warmer lake air as it rises. The resulting breeze, called the land breeze, blows from land to lake. *See* Wisconsin Final Designations at 6, JA\_\_\_\_.

*See id.* at 10, JA\_\_\_\_. This observation, EPA noted, is consistent with an earlier conceptual model of Lake Michigan’s ozone formation and transportation. *See id.* In effect, the first part of Wisconsin’s analysis showed that wind carries emissions from Lake Michigan to Sheboygan’s monitors, especially the violating lakeshore monitor. *See id.* at 11-12, JA\_\_\_\_-\_\_\_\_.

2. *Zero-out comparison.* Relying on complex photochemical modeling, the second part of Wisconsin’s analysis looked at Sheboygan’s own emissions. As background, photochemical models break an area down into three-dimensional grid boxes. For each grid box, the model calculates the hour-by-hour impact that emissions, meteorology, and chemistry have on air-pollution levels. The result is a set of predictions about how much air pollution is in the area.

Using existing data, Wisconsin’s analysis modeled a base scenario that simulated air pollution at Sheboygan’s lakeshore monitor. *See Wisconsin Rec.* at 40, JA\_\_\_\_. The analysis also modeled a hypothetical scenario using inputs that “zero out” Sheboygan’s anthropogenic emissions—that is, this zero-out scenario simulated a world in which Sheboygan County produces *no* man-made emissions. *See id.* at 39, 41, JA\_\_\_\_, \_\_\_\_.

The results showed that design values at the lakeshore monitor were nearly identical in the two scenarios. *See id.* at 40, JA\_\_\_\_ (comparing results for Kohler Andrae monitor); Wisconsin Final Designations at 8, JA\_\_\_\_ (labeling Kohler

Andrae as the lakeshore monitor). Wisconsin thus concluded that Sheboygan's own emissions have little, if any, impact on the lakeshore monitor's violation. *See* Wisconsin Rec. at 41, JA\_\_\_\_.

3. *Distance from shoreline.* The final part of Wisconsin's analysis examined the relationship between design values at various monitors in Wisconsin near Lake Michigan and their distances from shore. *See id.* at 44-49, JA\_\_\_\_-\_\_\_\_. The analysis concluded that the farther inland a monitor is, the lower its design value. *See id.* at 47, JA\_\_\_\_. From this relationship Wisconsin calculated that the design value meets the ozone standards at 2.3 miles inland. *See id.* at 46-47, JA\_\_\_\_-\_\_\_\_. The state thus concluded that any nonattainment area should not extend past this point. *See id.* at 44, JA\_\_\_\_.

\* \* \*

Reviewing this three-part analysis, EPA noted the “overwhelming transport from upwind areas along the lakeshore” and the zero-out comparison showing that “reducing Sheboygan area emissions would not affect ozone concentrations at the [lakeshore] monitor . . . .” Wisconsin Final Designations at 41, JA\_\_\_\_; *see id.* at 40, JA\_\_\_\_ (comparing emissions in Chicago region with those in Sheboygan). For these reasons, EPA said, it “does not believe there is sufficient evidence that these other portions of Sheboygan County contribute to air quality at the violating

monitor.” *Id.* at 41, JA\_\_\_\_. Instead, EPA concluded, only part of the county should be designated nonattainment. *See id.*

As for which part, the agency’s initial nonattainment area was a roughly 3.2-mile wide swath of the lakefront. *See* Wisconsin Intended Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (Wisconsin Intended Designations) at 42-43, JA\_\_\_\_-\_\_\_\_. That boundary was based on the inland monitor’s distance from shore (3.2 miles). To EPA, the monitor’s compliance, together with Wisconsin’s lake-breeze analysis, “indicate that the spatial extent of the violating area is not likely to extend beyond the location of the [inland] monitor . . . .” *Id.* at 42, JA\_\_\_\_. Wisconsin objected. It argued that 3.2 miles is overinclusive because the inland monitor is complying, so the boundary should be closer to shore. *See* Wisconsin’s Response to EPA’s Intended Nonattainment Area Designations for the 2015 Ozone NAAQS Technical Support Document (Feb. 2018) (Wisconsin Response) at 29, JA\_\_\_\_. In response, EPA re-examined the state’s technical analysis and decided to rely on the 2.3 miles that Wisconsin had calculated using the distance-from-shoreline method. *See* Wisconsin Final Designations at 41, JA\_\_\_\_. Sheboygan’s final nonattainment area is thus a roughly 2.3-mile wide stretch of the lakefront. *See id.*

Petitioners challenge this designation on four narrow grounds. *See* Br. at 59-60, 74-76. None survives scrutiny.

First, they contend that the designation “conflicts” with EPA’s own five-factor holistic analysis. *Id.* at 70. It does not. EPA’s analysis relies on county-level data; Wisconsin’s analysis offers additional information, including data about areas *within* Sheboygan County. That is, the state offered a more granular and nuanced view of ozone transport in the county. In particular, though Petitioners emphasize Sheboygan’s own emissions, *id.* at 74-76, Wisconsin’s zero-out comparison showed that those emissions have, at most, negligible effect on the violating lakeshore monitor. *See* Wisconsin Rec. at 39-41, JA\_\_\_\_-\_\_\_\_. So EPA did not, as Petitioners insist, ignore Sheboygan’s emissions. Rather, it reasonably concluded that those emissions’ impact was minimal. *See* Wisconsin Final Designations at 41, JA\_\_\_\_.

Second, Petitioners chastise EPA for relying on source-apportionment modeling that Wisconsin had submitted in addition to its three-part analysis.<sup>19</sup> *See* Br. at 60, 74. They misread the record. EPA did *not* rely on that modeling in its designation—in fact, it said it lacked enough information to evaluate the modeling. *See* Wisconsin Final Designations at 40, JA\_\_\_\_. And as the record shows, even as

---

<sup>19</sup> Source-apportionment modeling is a type of photochemical modeling that can trace emissions to their sources. *See* Guidance, Att. 3 at 11-12, JA\_\_\_\_-\_\_\_\_. To be clear, Wisconsin’s three-part analysis did *not* use source-apportionment modeling. *Compare* Wisconsin Rec. at 34-39, JA\_\_\_\_-\_\_\_\_ (source-apportionment modeling), *with id.* at 9-24, JA\_\_\_\_-\_\_\_\_ (lake breezes), 39-42, JA\_\_\_\_-\_\_\_\_ (zero-out comparison), 44-49, JA\_\_\_\_-\_\_\_\_ (distance from shoreline).

its conclusion discussed Wisconsin's three-part analysis, EPA made no mention of source apportionment. *See id.* at 41-42, JA\_\_\_\_ - \_\_\_\_.

Third, Petitioners mention in passing that the agency's rationale changed between its initial analysis and final designation. *See Br.* at 60. This argument refers to EPA's initial nonattainment boundary, roughly 3.2 miles from shore. After reviewing Wisconsin's objection that 3.2 miles is overinclusive, EPA reevaluated and relied on the state's distance-from-shoreline analysis, which supported a boundary at 2.3 miles. *See Wisconsin Final Designations* at 41, JA\_\_\_\_; *Wisconsin Response* at 29, JA\_\_\_\_. What happened here is precisely what the Act envisions: If EPA proposes to modify a state's recommendation, the state can try to persuade the agency to analyze the area differently—by, for example, giving more weight to existing data. *See* 42 U.S.C. § 7407(d)(1)(B)(ii).

Finally, Petitioners criticize Wisconsin's distance-from-shoreline method for being “novel.” *Br.* at 66; *see id.* at 70. But novelty by itself is no reason to second-guess EPA's conclusions. And having failed to spell out exactly what they think is wrong with that method, Petitioners cannot show that EPA arbitrarily weighed Wisconsin's analysis. Nor can they rescue their case by raising other arguments on reply. *See Bd. of Regents of Univ. of Wash. v. EPA (Univ. of Wash.)*, 86 F.3d 1214, 1221 (D.C. Cir. 1996) (holding as waived specific arguments not raised in opening brief, to prevent “sandbagging” respondents). Because all that Petitioners have

done is disagree with EPA's conclusion, this Court has no basis to deem that conclusion arbitrary. *See Miss. Comm'n*, 790 F.3d at 162.

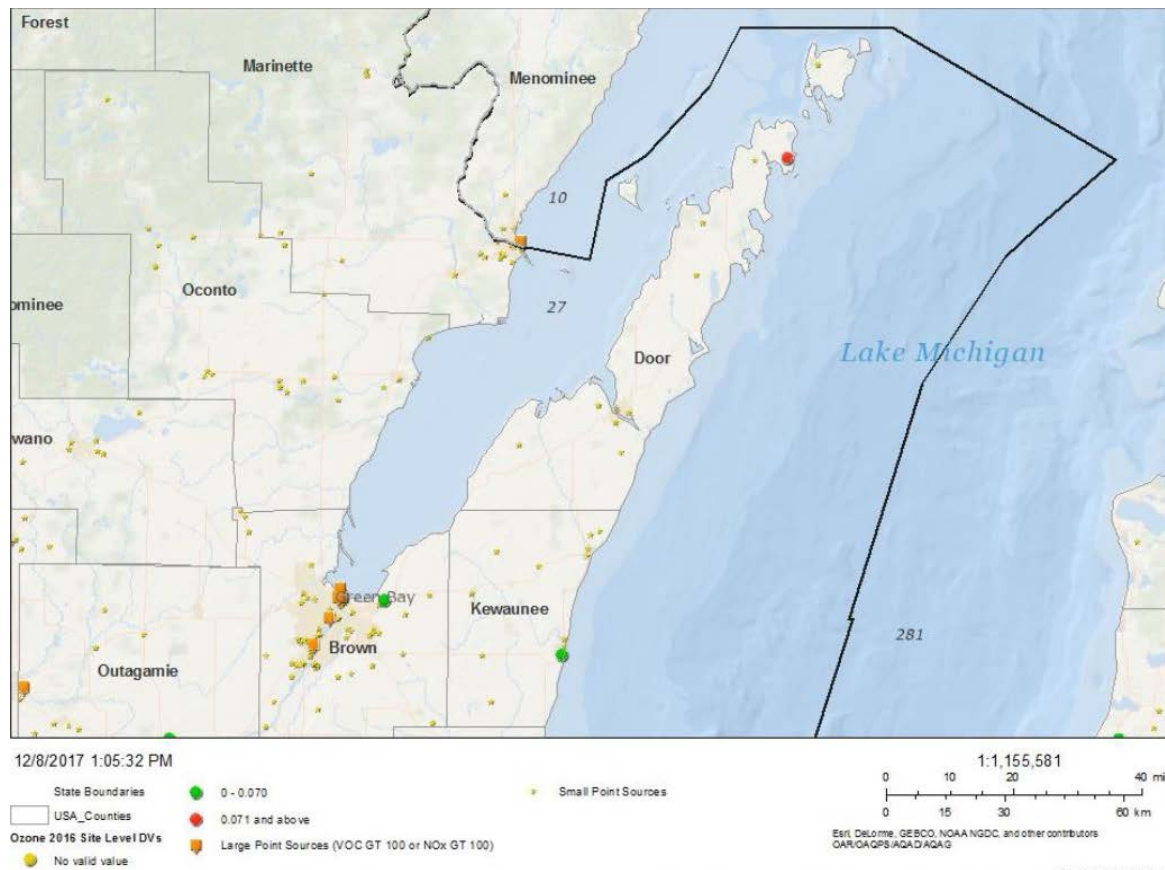
**V. The location of Door County, Wisconsin's monitor and other factors support designating part of the county nonattainment.**

Sparsely populated Door County in rural Wisconsin occupies a narrow peninsula in northern Lake Michigan. Wisconsin Final Designations at 57, 64, JA\_\_\_\_, \_\_\_\_\_. Shown as the red dot on the map on the next page, the county's sole violating monitor is located near the tip of the peninsula. *Id.* at 62, JA\_\_\_\_\_.

Adopting Wisconsin's suggestion, EPA designated nonattainment the immediate area around the monitor. *Id.* at 70, JA\_\_\_\_.<sup>20</sup>

---

<sup>20</sup> Though Wisconsin recommended Door for attainment, it also suggested a nonattainment area for the county in case EPA disagreed with the recommendation. Wisconsin Final Designations at 60, JA\_\_\_\_\_.



*Id.* at 62, JA\_\_\_\_.

In its holistic analysis, EPA considered the Door monitor's unusual location. On a spit of land jutting out into the lake, the monitor is susceptible to lake breezes that can bring emissions over Lake Michigan from distant upwind sources. *See id.* at 6-12, 57, 66-67, JA\_\_\_\_-\_\_\_\_, \_\_\_\_, \_\_\_\_-\_\_\_\_; *supra* Argument § IV (explaining lake breezes). EPA's modeling confirms that a large number of trajectories come from over the lake. *See* Wisconsin Final Designations at 67, JA\_\_\_\_. Meanwhile, Door County itself has low emissions. *See id.* at 62, 66, JA\_\_\_\_, \_\_\_\_\_. That is not surprising given that Door has no large point sources, only a handful of small point sources, and few people. *See id.* at 62-65, JA\_\_\_\_-\_\_\_\_. In light of Door's low



emissions, the lake-breeze effect, and the monitor's location, EPA attributed the violation to upwind emissions from distant sources over the lake rather than any local sources. *See id.* at 57, 70, JA\_\_\_\_, \_\_\_\_\_. So the agency limited Door's nonattainment area to the state park where the monitor is sited. *See id.* at 70, JA\_\_\_\_\_.

Petitioners agree that only part of Door County should be designated nonattainment. *See Br.* at 82. They just think that EPA should have stuck with its initial nonattainment area, which covered a larger chunk of Door. *See id.* But on arbitrary-and-capricious review—especially when EPA has considerable discretion to weigh evidence—it is not enough to disagree with the agency's conclusion. *See Miss. Comm'n*, 790 F.3d at 162. Petitioners must also show why that conclusion is arbitrary. They have not done so.

To begin, Petitioners contend that EPA adopted Wisconsin's suggested nonattainment area without confirming that nonattainment is limited to that area. *Br.* at 81-82. The record shows the opposite. As the agency explained in its holistic analysis, Door itself generates little emissions, plus its monitor stands directly in the path of lake breezes. That unusual set of circumstances allowed EPA to reasonably conclude that Door's nonattainment area was limited to the monitor's immediate vicinity. Wisconsin Final Designations at 57, 70, JA\_\_\_\_, \_\_\_\_\_.

Relatedly, Petitioners contend that EPA ignored evidence of “significant emissions” in the north part of Door County. Br. at 82. They misunderstand the basis of Door’s nonattainment designation. EPA never thought that emissions from Door’s own sources meaningfully contributed to the monitor’s violation—and it said so. *See* Wisconsin Intended Designations at 79, JA\_\_\_\_ (“emission and emissions-related data are relatively low.”); Wisconsin Final Designations at 70, JA\_\_\_\_ (“EPA does not believe there is sufficient evidence that these other portions of Door County contribute to air quality at the violating monitor.”). Both the initial and final nonattainment areas were thus meant to capture only the “spatial extent of the violating”—not the contributing—“area in Door County . . . .” Wisconsin Intended Designations at 79, JA\_\_\_\_; *see* Wisconsin Final Designations at 70, JA\_\_\_\_ (noting that the final nonattainment area is the geographic area “expected to have air quality that does not meet the [ozone standards]”). In their comments, Petitioners did not object to EPA’s focus on the violating area as the basis for Door’s nonattainment designation. Although the Clean Air Act does not require designations to undergo notice and comment, here EPA invited the public to comment. And having withheld comments about alleged contributions from Door’s own sources, Petitioners should not be allowed to complain about that now. *Cf. Nat’l Ass’n of Clean Air Agencies v. EPA*, 489 F.3d 1221, 1231 (D.C. Cir. 2007) (“it is a hard and fast rule of administrative law, rooted in simple fairness,

that issues not raised before an agency are waived and will not be considered by a court on review.” (internal brackets omitted)).

At any rate, the record shows that EPA *did* recognize that what emissions Door produced were concentrated in the north. *See* Wisconsin Final Designations at 66, JA\_\_\_\_. But in EPA’s judgment, that evidence did not outweigh evidence of Door’s low overall emissions and the monitor’s susceptibility to lake breezes. *See id.* at 57, JA\_\_\_\_. Petitioners have not shown why that judgment is unreasonable.

Lastly, Petitioners appear to contend that EPA made inconsistent statements about whether it relied on 100-meter high trajectories. *See* Br. at 81-82. They first point to the part of EPA’s holistic analysis noting Wisconsin’s argument that 100-meter trajectories came almost exclusively from over Lake Michigan. *See id.* at 81 (citing Wisconsin Final Designations at 67, JA\_\_\_\_). Then they spotlight EPA’s statement that “‘higher-level . . . trajectories (500m and 1000m) traversing land areas in Wisconsin have some value in detecting the potential impacts from long-range’” sources in certain regulatory determinations. *Id.* (quoting Wisconsin Final Designations at 72, JA\_\_\_\_). Yet all that EPA said here is that depending on context, some trajectory levels may be more informative than others, but all three levels have value. And in its holistic analysis EPA considered all three levels, as memorialized by a map in the final designations showing trajectories at all three levels. Wisconsin Final Designations at 67, JA\_\_\_\_.

Because Petitioners have not shown anything amiss in EPA's holistic analysis of Door, the Court should uphold this designation.

**VI. EPA reasonably concluded that Ottawa County, Michigan was not part of a “nearby” area that had to be analyzed for contribution.**

Michigan recommended attainment for Ottawa County, and EPA designated it as such. Michigan Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (Michigan Designations) at 2, JA\_\_\_\_; 83 Fed. Reg. at 25,815. Ottawa, on the shores of Lake Michigan in western Michigan, has no violating monitors. Michigan Designations at 23-24, 32, JA\_\_\_\_-\_\_\_\_, \_\_\_\_\_. So it is not in nonattainment for violating the standards itself. *See* 42 U.S.C. § 7407(d)(1)(A)(i). The question, then, is whether Ottawa contributes to a “nearby” violation. *See id.*; *Miss. Comm’n*, 790 F.3d at 151 (approving EPA's argument that the Act does not require nonattainment designations for all contributors, only “nearby” ones).

The statutory term “nearby,” as this Court has long recognized, is ambiguous. *See Miss. Comm’n*, 790 F.3d at 151 (collecting cases). So before Ottawa had to be analyzed for potential contribution, EPA had to determine whether it was “nearby” to an area with a violating monitor. In other words, should Ottawa be included in an area of analysis for contribution? *See id.* (noting that EPA's area of analysis is the agency's interpretation of the statutory term “nearby”); Guidance at 5-6, JA\_\_\_\_-\_\_\_\_ (similar).

The answer rested on EPA's analysis of violating monitors in neighboring Allegan and Muskegon Counties. (Ottawa is directly north of Allegan and directly south of Muskegon.) Allegan and Muskegon each has a violating monitor. *See* Michigan Designations at 23-24, 32-33, JA\_\_\_\_-\_\_\_\_, \_\_\_\_-\_\_\_\_. EPA generally uses either the Combined Statistical Area or, "where appropriate," the smaller Core Based Statistical Area as the area of analysis around violating monitors. Guidance at 5, JA\_\_\_\_. For the violating monitors in Allegan and Muskegon, EPA used Core Based Statistical Areas (and to preview the ending, Ottawa was in neither area of analysis). *See* Michigan Designations at 22, 31, JA\_\_\_\_, \_\_\_\_.

In defining the areas of analysis for Allegan and Muskegon, EPA considered regional meteorology. Like other areas around Lake Michigan, western Michigan sees lake breezes that can carry upwind emissions to downwind shoreline monitors, including, EPA observed, those in Allegan and Muskegon. *See id.* at 20-22, JA\_\_\_\_-\_\_\_\_. This observation is supported by modeling showing that on days when Allegan and Muskegon's monitors recorded exceedances, dozens of trajectories come from Chicago and Milwaukee, two major metropolises across the lake. *See id.* at 29, 39, JA\_\_\_\_, \_\_\_\_; *id.* at 20, JA\_\_\_\_ (noting that "meteorological data strongly indicates that" violating monitors in Allegan and Muskegon are "predominantly affected by the transport of emissions over Lake Michigan."). That volume stands in sharp contrast to the few trajectories passing through

Ottawa. *See id.* at 29, 39, JA\_\_\_\_, \_\_\_\_\_. Meanwhile, data showed emissions from Chicago and Milwaukee dwarfing emissions from rural western Michigan counties.<sup>21</sup> *See id.* at 31, 41, JA\_\_\_\_, \_\_\_\_\_. The meteorology data, in short, showed that violations at the Allegan and Muskegon monitors were tied to distant sources over Lake Michigan rather than to western Michigan.

EPA, in turn, decided that the areas of analysis for those two monitors (in western Michigan) could be single-county areas. It thus defined the area of analysis for Allegan's violation as the (single-county) Holland Core Based Statistical Area<sup>22</sup> (that is, Allegan County); and the area of analysis for Muskegon's violation, the (single-county) Muskegon Core Based Statistical Area (that is, Muskegon County). *Id.* at 22, 31, JA\_\_\_\_, \_\_\_\_\_. These definitions are also in keeping with the agency's past treatment of Allegan and Muskegon. *See* 69 Fed. Reg. 23,858, 23,911 (Apr. 30. 2004) (designations for 1997 ozone standard) (showing that Allegan and Muskegon were analyzed as single-county areas while

---

<sup>21</sup> Petitioners fault EPA for an "apples-to-oranges" comparison of individual western Michigan counties with aggregated upwind counties. Br. at 85 n.11. But EPA's comparison here is only meant to show ozone transport around the lake. It is unclear why Petitioners think it a problem for this purpose. What makes their criticism all the more baffling is that Petitioners go on to contrast EPA's treatment of individual western Michigan counties with treatment of the urbanized Detroit nonattainment area, a group of seven counties. *See id.* at 85; Michigan Designations at 2, JA\_\_\_\_. Their comparison, aimed at showing disparate treatment, is the real (and thus improper) "apples-to-oranges" comparison.

<sup>22</sup> Holland is one of Allegan's bigger cities.

Ottawa was analyzed as part of the Grand Rapids area); 56 Fed. Reg. 56,694, 56,778 (Nov. 6, 1991) (designations for 1979 ozone standard) (same); *cf.* Michigan Designations at 22, 31, JA\_\_\_\_, \_\_\_\_\_. Because Ottawa lies outside both areas of analysis, EPA did not evaluate it as a “nearby” contributor under the statute.<sup>23</sup> *See* 42 U.S.C. § 7407(d)(1)(A)(i).

Petitioners spill little ink on EPA’s definitions of the two areas of analysis—so little, in fact, that it is unclear whether they challenge those determinations. *See* Br. at 2-3, 83. They have thus waived the issue. *See Univ. of Wash.*, 86 F.3d at 1221 (holding that petitioners waived issue in opening brief by “merely stating [it], in conclusory fashion and without visible support”).

Even if Petitioners raised the issue, they say only that Ottawa is in the same (larger, multi-county) Combined Statistical Area as Allegan and Muskegon, so obviously Ottawa is “nearby.” Br. at 83 & n.10. But that bare-bones assertion says nothing about why EPA’s choice of (single-county) Core Based Statistical Areas as its areas of analysis is unreasonable or inappropriate. *See id.* at 83-92; Guidance at 5, JA\_\_\_\_. And it certainly says nothing about why, in making that choice, EPA acted arbitrarily to rely on regional meteorology. At most, Petitioners

---

<sup>23</sup> Another example of an adjacent county that falls outside the areas of analysis for Allegan and Muskegon is Van Buren County, directly south of Allegan. *See* Michigan Designations at 39, JA\_\_\_\_\_.

have shown only their preference for different areas of analysis. That is not nearly enough to overturn EPA's conclusions. *See Miss. Comm'n*, 790 F.3d at 162.

**A. EPA acted well within its discretion to reject a study that used stale data and offered incomplete analysis.**

In any event, Petitioners have not shown why Ottawa is a contributor. They rely chiefly on a study, submitted with their comments, that analyzes emissions from the JH Campbell plant in Ottawa County. *See Br.* at 85, 87, 89-91; Comments of Sierra Club on EPA's Intended Ozone Nonattainment Areas for Michigan (Feb. 5, 2018), JA\_\_\_\_-\_\_\_\_. But as EPA pointed out, the study used modeling from 2011 and ignored controls that Campbell later installed. Response to Comments at 20, JA\_\_\_\_; *see Miss. Comm'n*, 790 F.3d at 158 (emphasizing the "significant deference" owed to EPA on "data quality or sufficiency"). Petitioners admit as much. *See Br.* at 89 ("the plant's emissions profile has changed since the date of the emissions data used in the modeling due to upgrades at two of three boilers").

Undeterred, they assert that the study shows that even after Campbell installed controls, the plant "was, by itself, at times still emitting at the same daily levels that the modeling showed contributed to significantly increased ozone concentrations at the violating monitors." *Id.* But it is not enough that emissions exist. They have to be linked to exceedances at the violating monitors. That is why EPA's holistic analysis considers emissions alongside other factors like



modeled trajectories on exceedance days. *See* Guidance, Att. 3 at 3, JA\_\_\_\_.

Petitioners' study, however, fails to link emissions to exceedance. Or, as EPA put it in rejecting the study, it says nothing about the dates of Campbell's emissions, whether they match exceedance dates at the violating monitors, or wind trajectories that might transport Campbell's emissions to those monitors. *See* Response to Comments at 20, JA\_\_\_\_. Though Petitioners grumble that "[n]ever before has EPA held air dispersion modeling to that high a standard," Br. at 90, the agency was simply assessing Petitioners' study using the same factors as those in its holistic analysis. *See* Guidance, Att. 3 at 3-10, JA\_\_\_\_-\_\_\_\_. There was nothing arbitrary in EPA's rejection of the study.<sup>24</sup>

**B. Petitioners' other contribution arguments are meritless.**

Nor can Petitioners otherwise establish Ottawa as a contributor. First, they spotlight various emissions from Ottawa County. *See* Br. at 85-87. But again, emissions alone cannot prove contribution. And again Petitioners do not link emissions to exceedance. If anything, the record indicates that such a link does not exist, as trajectory modeling shows nearly no wind coming from Ottawa at the Allegan and Muskegon monitors on exceedance days. *See* Michigan Designations at 29, 39, JA\_\_\_\_, \_\_\_\_\_. The modeling, which covers 24-hour periods, also lends no

---

<sup>24</sup> Different modeling used in the Wisconsin designations cannot, as Petitioners urge, rehabilitate the Campbell study. *See* Br. at 91.

support to Petitioners' theory that wind blows Ottawa's emissions to the lake and then to the violating monitors. *See* Br. at 88 (accusing EPA of ignoring land breezes); *supra* Argument § IV (explaining lake and land breezes).

Second, Petitioners quibble with EPA's description of Muskegon's monitor as a "shoreline" location. Br. at 88; *see* Michigan Designations at 5, JA\_\_\_\_. They say that the monitor is not on the shore because it is three miles inland. *See* Br. at 88. That misses the point. EPA was simply using "shoreline" as a shorthand to refer to locations, like the Muskegon monitor, that are close enough to the lake to experience the lake-breeze effect. *See* Michigan Designations at 5, 29-30, JA\_\_\_\_, \_\_\_\_-\_\_\_\_.

Finally, Petitioners note that Allegan's violating monitor is on the border with Ottawa, so "it is quite likely there are areas within [Ottawa] that are also violating" the ozone standards. Br. at 84. The Court should not credit that contention. For one thing, the monitor itself is in Allegan County. EPA already accounted for that violation when it designated part of Allegan nonattainment, a decision not challenged here. *See* Michigan Designations at 41, JA\_\_\_\_. More to the point, Petitioners offer no record evidence to support their speculation that Ottawa itself has a violation. What the record instead shows is that Ottawa's monitor is complying with the standards. *Id.* at 23, JA\_\_\_\_.

To recap, EPA determined that Ottawa is not in the area of analysis for either the Allegan or Muskegon violations, a determination that Petitioners do not seriously challenge. Because only contributors in the area of analysis (that is, “nearby” contributors) are designated nonattainment, Petitioners’ arguments—all about whether Ottawa is a contributor—win them nothing. Those arguments are, in any case, flawed and the Court should reject them.<sup>25</sup>

**VII. Unique topography and other factors justify excluding northern Weld County from the Denver nonattainment area.**

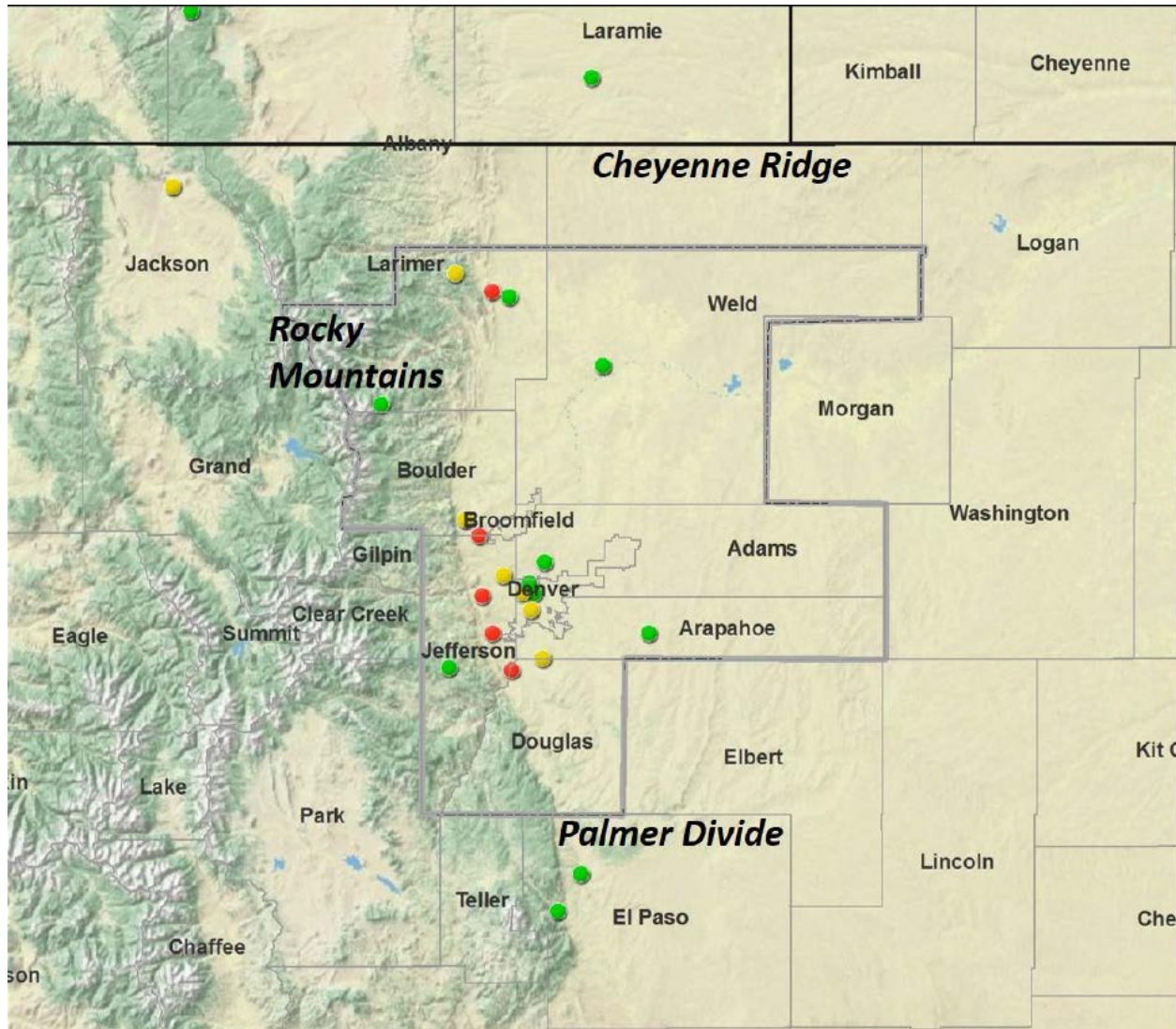
Colorado’s Weld County lies north of Denver and extends all the way to the Wyoming border. *See* Denver Metro/North Front Range Nonattainment Area: Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (Denver Designations) at 34, JA\_\_\_\_. The county is part of EPA’s area of analysis for the Denver region, home of five violating monitors. *See id.* at 8, JA\_\_\_\_. Though Weld’s own monitor was complying, EPA concluded that southern Weld County contributes to the nearby violations. *See id.* at 8, 35, JA\_\_\_\_, \_\_\_\_\_. So the agency followed Colorado’s

---

<sup>25</sup> Petitioners complain that EPA did not respond to comments about Ottawa’s contribution. Br. at 92. Not only is public comment not required in the designation process, but the record shows that EPA addressed Petitioners’ comments. *See* 42 U.S.C. § 7407(d); *supra* Argument § VI; *cf. Thompson v. Clark*, 741 F. 2d 401, 409 (D.C. Cir. 1984) (finding no violation of Administrative Procedure Act when the agency considered all relevant factors).

recommendation and included that part of the county in the Denver nonattainment area. *See id.* at 6, 36, JA\_\_\_\_, \_\_\_\_.

Several factors in the holistic analysis led EPA to this conclusion. Start with the area's unique topography:



*Id.* at 34, JA\_\_\_\_ (outlining nonattainment area in black dash marks). Elevated terrain—the Palmer Divide, the Rocky Mountains, and the Cheyenne Ridge—form a three-sided basin around the Denver region. *See id.* at 33, JA\_\_\_\_. That terrain

also shapes the basin's wind patterns. *See id.* at 27-28, JA\_\_\_\_-\_\_\_\_. Together, terrain and wind “effectively close off the basin[.]” *Id.* at 33, JA\_\_\_\_. What this means in practical terms is that the basin “trap[s]” its own emissions within, making it hard for ozone to disperse. *Id.* at 28, JA\_\_\_\_; *see id.* at 33, 36, JA\_\_\_\_, \_\_\_\_\_. More importantly for the contribution analysis, the basin keeps out most emissions originating from its upper reaches, like northern Weld County. *See id.* at 33, JA\_\_\_\_ (explaining that the basin “enhance[s] contributions from sources in the basin . . . [and] restrict[s] contributions from sources on the upper reaches of and beyond the [topographic] features, including the northern parts of Weld”); *id.* at 36, JA\_\_\_\_ (“unique meteorological conditions and topographic features . . . indicate that emissions in Northern Weld . . . Count[y is] not likely to contribute to violating monitors.”). The basin effect thus supports EPA's conclusion that northern Weld County does not contribute to air quality at the violating monitors, all located inside the basin.

Other evidence reinforces that conclusion. The great majority of Weld's point sources and oil and gas wells are in the south, with the north generating only 25 percent of the county's NO<sub>x</sub> emissions and 18 percent of VOC emissions. *See id.* at 14-15, JA\_\_\_\_-\_\_\_\_. The north, home to just 1 percent of the county's population, also has very little traffic compared with the south. *See id.* at 22, 36, JA\_\_\_\_, \_\_\_\_\_. Not that there are many avenues for the north's emissions to travel

south, given that just a handful of modeled trajectories pass through northern Weld County. *See id.* at 23-27, JA\_\_\_\_-\_\_\_\_; *id.* at 31-32, JA\_\_\_\_-\_\_\_\_ (noting that Colorado’s independent analysis also showed few trajectories). In light of all these factors, EPA concluded that only the southern part of Weld County should be included in the nonattainment area. *See id.* at 36, JA\_\_\_\_. To draw the nonattainment boundary, EPA used the same dividing line as it had in two earlier rounds of ozone designations.<sup>26</sup> *See id.* at 35, JA\_\_\_\_; Guidance, Att. 3 at 10, JA\_\_\_\_ (contemplating use of past nonattainment boundaries).

Petitioners disagree with EPA’s designation. But their arguments, when not mangling the law, mangle the facts.

**A. EPA applied the correct contribution analysis.**

Petitioners claim that instead of asking whether Weld “contributes” to nearby violations, EPA applied a “significantly contributes” test. *See Br.* at 108-12. They are wrong.

As a factual matter, nothing in the record suggests that EPA ever used “significant contribution” as the standard to designate Weld. That may be why Petitioners offer no spot-on record citations to support their theory. What the record does show is that in analyzing Weld for contribution, EPA used the same

---

<sup>26</sup> Petitioners admit this fact. *Br.* at 24. That admission refutes their insinuation that EPA drew the boundary randomly. *See id.* at 112, 116.



multi-factor, holistic approach that this Court has repeatedly upheld. *See* Denver Designations at 7-37, JA\_\_\_\_ - \_\_\_\_; *Miss. Comm’n*, 790 F.3d at 149-50; *Catawba*, 571 F.3d at 39. That fact alone defeats Petitioners’ argument.

But there is more. As a legal matter, Petitioners’ argument conflates different statutory requirements. Citing an EPA action on a Wyoming implementation plan, Petitioners stress that EPA had determined that Wyoming “significantly contributes” to nonattainment in the Denver region. *See* Br. at 111 (citing 82 Fed. Reg. 9142 (Feb. 3, 2017)). The Wyoming action, however, was taken under a provision of the Clean Air Act that deals with interstate transport of pollution from distant sources. *See* 82 Fed. Reg. at 9142 (citing Section 110(a)(2)(D)(i), 42 U.S.C. § 7410(a)(2)(D)(i)). That provision requires implementation plans—a different regulatory action than designations—to prohibit one state from “contribut[ing] significantly” to nonattainment in another state. 42 U.S.C. § 7410(a)(2)(D)(i)(I). Whether significant contribution exists in this context entails an inquiry that looks at things like the costs and benefits of various emission controls. *See EPA v. EME Homer City Generation, LP*, 572 U.S. 489, 501-02 (2014). That is totally different from the holistic contribution analysis used in designations. Petitioners’ interstate-transport example thus in no way undercuts the reasonableness of EPA’s contribution analysis of Weld.

Nor can Petitioners count on the “significant contribution” test for rural transport areas to save the day. *See* Br. at 111 (citing 42 U.S.C. § 7511a(h)(2)). These areas enjoy relief from certain requirements that implementation plans place on nonattainment areas. *See* 42 U.S.C. § 7511a(h). To qualify, an area (among other things) cannot have emission sources that make a “significant contribution” to ozone concentration in that or any other area. *Id.* § 7511a(h)(2). But again, this inquiry involves a different statutory provision—and a different phase of the regulatory process—than Section 7407(d), the designation provision. *See id.* § 7511a (setting forth requirements for state implementation plans). Petitioners’ invocation of rural transport areas is all the more futile given that EPA did not deem Weld as such. Rural transport areas, in short, are irrelevant to the Court’s review of Weld’s designation. *See* Denver Designations at 1-37, JA\_\_\_\_-\_\_\_\_.<sup>27</sup>

**B. Petitioners, not EPA, distort local topography.**

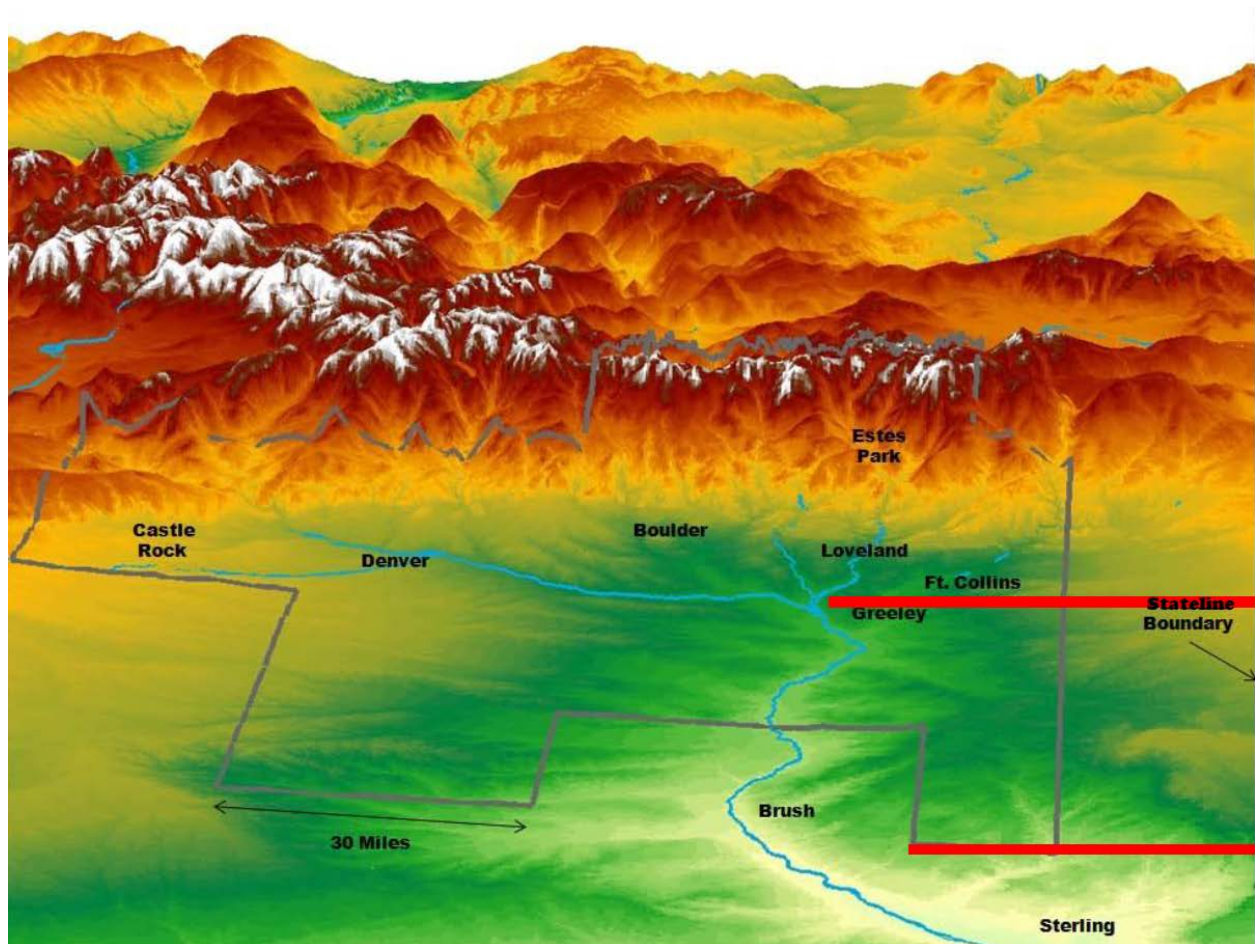
Petitioners attack the placement of Weld’s nonattainment boundary as arbitrary and capricious. As they see it, in drawing that boundary EPA played fast and loose with the location of the Cheyenne Ridge. *See* Br. at 112-16. In truth it is Petitioners who are playing fast and loose with the facts.

---

<sup>27</sup> Petitioners cite this Court’s opinion in *North Carolina v. EPA* to argue that differences in plain language are relevant to statutory interpretation. *See* Br. at 111 (citing 531 F.3d 896, 909-11 (D.C. Cir. 2008)). But we have already shown that EPA did not ignore plain statutory language.



The Cheyenne Ridge runs along Colorado's border with Wyoming. *See* Denver Designations at 27, JA\_\_\_\_. True to its name, the Cheyenne Ridge is a ridge, not a sheer cliff that pops up out of the earth. It slopes up in northern Weld County, gradually gaining elevation as it nears Wyoming. *See id.* at 36-37, JA\_\_\_\_-\_\_\_\_.



*Id.* at 37, JA\_\_\_\_. In this topographic map of the Denver basin (note that the right-hand side is north), the Denver nonattainment area is outlined in gray. We added red lines to mark the rough locations of Weld's east and west boundaries.

*Compare with id.* at 34, JA\_\_\_\_ (showing county boundaries). As the map shows

(and as EPA explained in its final designation), northern Weld County has “elevated terrain” (in yellow) that forms the “southern aspect [of] Cheyenne Ridge . . . .” *Id.* at 36, JA\_\_\_\_.

Petitioners complain that EPA “switched back and forth” between claiming that the Cheyenne Ridge is in northern Weld County and claiming that it is on the Wyoming border. Br. at 113 (citing Denver Designations at 27, 36, JA\_\_\_\_, \_\_\_\_); *see id.* at 114-15. There was no “switch.” The Cheyenne Ridge extends from northern Weld County to the Wyoming border. So EPA accurately described the ridge’s location. *See* Denver Designations at 27, 36, JA\_\_\_\_, \_\_\_\_\_. It did not, as Petitioners claim, “move mountains.” Br. at 113.<sup>28</sup>

Petitioners also insist that “much of northern Weld” is on the same flat terrain (in dark green) as Greeley, Fort Collins, and Loveland. *Id.* at 114. That topography is pure fiction. The actual map above shows much of northern Weld County in the yellow that represents elevated terrain.

---

<sup>28</sup> For that reason, maps in both EPA’s initial analysis and final designation correctly place the label for the Cheyenne Ridge between northern Weld County and the Wyoming border. *See* Denver Metro/North Range Nonattainment Area: Intended Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document at 32, JA\_\_\_\_; Denver Designations at 34, JA\_\_\_\_; Br. at 34, 113.

**C. Petitioners' other arguments are meritless.**

Three more arguments complete Petitioners' challenge to Weld's designation. None undercuts EPA's action.

First, Petitioners want EPA to set Weld's nonattainment boundary based on elevation, as it did for Uinta Basin in Utah. *Id.* at 115-16. They cannot raise this issue for the first time in litigation. *Cf. Nat'l Ass'n of Clean Air Agencies*, 489 F.3d at 1231 (holding that issues not raised before agency are waived). Nor is Petitioners' argument meritorious. EPA delineated Weld's nonattainment area using the same boundary as it had in earlier ozone designations. *See Denver Designations* at 35, JA\_\_\_\_. By contrast, EPA's designation of the Uinta Basin (a decision not challenged here) is based on facts specific to that area. *See Utah Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document* at 29-50, JA\_\_\_\_-\_\_\_\_. Petitioners' preference for a different boundary in Weld thus cannot prove that EPA's choice is arbitrary.

Second, Petitioners fault EPA for ignoring data from a monitor in Boulder. Br. at 116. No 2016 data was available for the Boulder monitor, so it had no valid 2014-2016 design value. *See Denver Designations* at 8, JA\_\_\_\_. Petitioners want EPA to have used the monitor's 2013-2015 data, which would have shown a violation. Br. at 116. That course, however, would have meant using 2013-2015 data for the Boulder monitor, while using 2014-2016 data for all other monitors in

the Denver area of analysis. *See* Denver Designations at 7, JA\_\_\_\_. EPA reasonably refused to “rely on this mismatched dataset.” *Miss. Comm’n*, 790 F.3d at 160 (upholding “EPA’s conclusion that comparing data from the same time period would be more appropriate than analyzing data from different time periods in the same evaluation process.”); *see id.* at 158 (giving “significant deference” to EPA “in matters concerning data quality or sufficiency”). At any rate, Petitioners do not explain how the 2013-2015 Boulder data would have affected EPA’s holistic analysis of northern Weld County. *See* Response to Comments at 44, JA\_\_\_\_ (noting that any impact on the Boulder monitor would have come from *southern* Weld County).

Third, Petitioners say that EPA should have considered northern Weld County’s emissions in relation to emissions from nonattainment counties. Br. at 117-18. But Weld’s designation is the product of a holistic analysis in which no single factor is necessarily dispositive. *See Catawba*, 571 F.3d at 46. In their narrow focus on one aspect of emissions data, Petitioners do not explain how their preferred approach could alter the weight of evidence for Weld. That is far from enough to justify overturning EPA’s action. *See Miss. Comm’n*, 790 F.3d at 162.

**VIII. The Court should remand the remaining designations without vacatur.**

Petitioners challenge four more sets of designations: parts of the Milwaukee Combined Statistical Area;<sup>29</sup> Manitowoc County, Wisconsin; parts of the Chicago IL-IN-WI Combined Statistical Area;<sup>30</sup> and El Paso County, Texas (together, the remaining designations). Br. at 2-3. To the extent the Court finds that Petitioners have standing to challenge the remaining designations, EPA requests remand of those designations without vacatur to review them. *But see supra* Argument I (showing that Petitioners lack standing to challenge the El Paso, Kenosha, McHenry, and Porter designations).

In making this request, EPA does not confess error or impropriety. *See Limnia, Inc. v. U.S. Dep't of Energy*, 857 F.3d 379, 387 (D.C. Cir. 2017) (stating that remand requests do not require such confessions). Rather, having completed the remaining designations alongside those for the rest of the country, and in hindsight (including after considering Petitioners' brief), EPA believes that the

---

<sup>29</sup> The disputed designations are for the Wisconsin counties Milwaukee, Ozaukee, Racine, Waukesha, and Washington. Br. at 2-3, 60-69.

<sup>30</sup> The disputed designations are for Kenosha County, Wisconsin; McHenry County, Illinois; and Porter County, Indiana. Br. at 2-3, 70-74, 48-59.

Court could benefit from additional explanations of the remaining designations.<sup>31</sup>

The agency should be allowed to review its decisions for these designations. That review could potentially entail a range of actions, such as supplementing the record, additional communications with states, and undertaking the 120-day notice process. *See* 42 U.S.C. § 7407(d)(1)(B)(ii).

This Court “commonly grant[s]” remand requests. *Ethyl Corp. v. Browner*, 989 F.2d 522, 524 (D.C. Cir. 1993). Doing so here would avoid “wasting the courts’ and the parties’ resources . . . .” *Id.*; *see B.J. Alan Co. v. Interstate Commerce Comm’n*, 897 F.2d 561, 563 n.1 (D.C. Cir. 1990) (“administrative reconsideration is a more expeditious and efficient means of achieving adjustment of agency policy than is resort to the federal courts.” (internal brackets and quotation marks omitted)). For one thing, remand would save the parties from having to spend any more time litigating over the current record. On remand EPA could supplement the record or modify the remaining designations in ways that could moot Petitioners’ challenges or at least narrow issues for judicial review.

---

<sup>31</sup> The remaining designations are, after all, a tiny fraction of the thousands of designations that EPA issued, under statutory and judicial deadlines, for the 2015 ozone standards. *See supra* Statement of the Case § II.

And if litigation does continue after remand, a supplemented record would make it easier for the Court to assess the agency's rationale.<sup>32</sup>

Separately, in ordering remand, this Court should not vacate the remaining designations. Whether to vacate turns on (1) the “seriousness of the [action’s] deficiencies” and (2) “the disruptive consequences of an interim change that may itself be changed.” *Allied-Signal, Inc. v. U.S. Nuclear Regulatory Comm’n*, 988 F.2d 146, 150-51 (D.C. Cir. 1993) (internal quotation marks omitted). Both factors weigh against vacatur here.

First, EPA confesses no error in either the record or the remaining designations. Whether the agency ends up supplementing the record or revising the designations on remand, neither action makes the current designations legally deficient, let alone seriously so. *See Miss. Comm’n*, 790 F.3d at 150 (giving EPA broad discretion to make technical decisions).

Second, because on remand the agency could let the remaining designations stand, it would be unnecessarily disruptive to vacate them now, only to have EPA issue the same designations later. More importantly, vacatur of nonattainment designations (in Wisconsin) would lift environmental protections now in place, an outcome this Court seeks to avoid. *See, e.g., Ctr. for Biological Diversity v. EPA*,

---

<sup>32</sup> Because each challenged designation is the product of EPA’s independent holistic analysis and has its own record, remand would not affect the Court’s review of the other designations.



861 F.3d 174, 188 (D.C. Cir. 2017). Those protections include, for example, emission offsets and installation of certain emission controls at new or modified stationary sources in nonattainment areas. *See* 42 U.S.C. § 7511a(a)(2)(C).

Vacatur of an area's nonattainment designation would also delay deadlines for that area to come into attainment—along with the accompanying public-health benefits. *See id.* § 7511(a)(1); 40 C.F.R. § 51.1303 Table 1. And the list goes on. *See* 42 U.S.C. § 7511a(a)(3) (requiring states to submit emissions information for nonattainment areas); *id.* § 7506(c) (requiring federally funded activities in nonattainment areas to, among other things, conform with implementation plans and avoid causing or contributing to new violations). Tellingly, Petitioners do not seek vacatur of the nonattainment designations as a remedy. *See* Br. at 124.

Granted, they do seek vacatur of the attainment designations. *Id.* But that relief would not produce the nonattainment designations Petitioners want. *See id.* That is because EPA would still need to decide what designations to issue.<sup>33</sup> Put another way, leaving the attainment designations in place on remand would not

---

<sup>33</sup> Despite what Petitioners think, this Court has no power to direct EPA to designate an area nonattainment. *See* Br. at 124; *e.g.*, *Fed. Power Comm'n v. Idaho Power Co.*, 344 U.S. 17, 20 (1952) (holding that courts impermissibly usurp administrative functions when dictating to agency how to exercise its discretion on remand); *Palisades Gen. Hosp. v. Leavitt*, 426 F.3d 400, 403 (D.C. Cir. 2005) (similar).



prejudice Petitioners because either way, they are not getting automatic nonattainment designations.

## CONCLUSION

In over 120 pages of briefing, Petitioners have made clear their disagreement with EPA's designations. What they have not made clear is their standing to challenge some of those designations. Nor have they shown that EPA overstepped its broad discretion in weighing the evidence. If the Court finds that it has jurisdiction over these challenges, it should defer to EPA's judgment and deny the petitions for Lake, Jefferson, Monroe, Sheboygan, Door, Ottawa, and Weld. It should remand the remaining designations to EPA without vacatur.

Submitted on May 10, 2019

*Of counsel*  
Seth Buchsbaum  
U.S. Environmental Protection Agency  
Office of General Counsel  
Washington, D.C.

Jeffrey Bossert Clark  
Assistant Attorney General  
  
/s/ Sue Chen  
Sue Chen  
Tsuki Hoshijima  
U.S. Department of Justice  
Environment & Natural Resources Div.  
Environmental Defense Section  
P.O. Box 7611  
Washington, D.C. 20044  
202.305.0283  
sue.chen@usdoj.gov

### **CERTIFICATES OF COMPLIANCE AND SERVICE**

I certify that this brief complies with Fed. R. App. P. 32(a)(5) and (6) because it uses 14-point Times New Roman, a proportionally spaced font.

I also certify that this brief complies with the Court's December 14, 2018, order (modifying Fed. R. App. P. 32(a)(7)(B)) because according to Microsoft Word's count, it has 13,760 words, excluding the parts of the brief exempted under Rule 32(f).

Finally, I certify that on May 10, 2019, I electronically filed this brief with the Court's CM/ECF system, which will serve each party.

/s/ Sue Chen  
Sue Chen

**Statutory and Regulatory Addendum****Table of Contents****Statutes**

42 U.S.C. § 7408 .....A2

42 U.S.C. § 7506 .....A6

**Code of Federal Regulations**

40 C.F.R. pt. 50, App. U .....A11

40 C.F.R. § 50.19 .....A15

40 C.F.R. § 51.1303.....A16

40 C.F.R. pt. 58 (excerpt).....A17

and maintenance of a PM<sub>2.5</sub> monitoring network necessary to implement the national ambient air quality standards for PM<sub>2.5</sub> under section 109 of the Clean Air Act [42 U.S.C. 7409]. This implementation shall not result in a diversion or reprogramming of funds from other Federal, State or local Clean Air Act activities. Any funds previously diverted or reprogrammed from section 105 Clean Air Act [42 U.S.C. 7405] grants for PM<sub>2.5</sub> monitors must be restored to State or local air programs in fiscal year 1999.

"(b) EPA and the States, consistent with their respective authorities under the Clean Air Act [42 U.S.C. 7401 et seq.], shall ensure that the national network (designated in subsection (a)) which consists of the PM<sub>2.5</sub> monitors necessary to implement the national ambient air quality standards is established by December 31, 1999.

"(c)(1) The Governors shall be required to submit designations referred to in section 107(d)(1) of the Clean Air Act [42 U.S.C. 7407(d)(1)] for each area following promulgation of the July 1997 PM<sub>2.5</sub> national ambient air quality standard within 1 year after receipt of 3 years of air quality monitoring data performed in accordance with any applicable Federal reference methods for the relevant areas. Only data from the monitoring network designated in subsection (a) and other Federal reference method PM<sub>2.5</sub> monitors shall be considered for such designations. Nothing in the previous sentence shall be construed as affecting the Governor's authority to designate an area initially as nonattainment, and the Administrator's authority to promulgate the designation of an area as nonattainment, under section 107(d)(1) of the Clean Air Act, based on its contribution to ambient air quality in a nearby nonattainment area.

"(2) For any area designated as nonattainment for the July 1997 PM<sub>2.5</sub> national ambient air quality standard in accordance with the schedule set forth in this section, notwithstanding the time limit prescribed in paragraph (2) of section 169B(e) of the Clean Air Act [42 U.S.C. 7492(e)(2)], the Administrator shall require State implementation plan revisions referred to in such paragraph (2) to be submitted at the same time as State implementation plan revisions referred to in section 172 of the Clean Air Act [42 U.S.C. 7502] implementing the revised national ambient air quality standard for fine particulate matter are required to be submitted. For any area designated as attainment or unclassifiable for such standard, the Administrator shall require the State implementation plan revisions referred to in such paragraph (2) to be submitted 1 year after the area has been so designated. The preceding provisions of this paragraph shall not preclude the implementation of the agreements and recommendations set forth in the Grand Canyon Visibility Transport Commission Report dated June 1996.

"(d) The Administrator shall promulgate the designations referred to in section 107(d)(1) of the Clean Air Act [42 U.S.C. 7407(d)(1)] for each area following promulgation of the July 1997 PM<sub>2.5</sub> national ambient air quality standard by the earlier of 1 year after the initial designations required under subsection (c)(1) are required to be submitted or December 31, 2005.

"(e) FIELD STUDY.—Not later than 2 years after the date of enactment of the SAFETEA-LU [Aug. 10, 2005], the Administrator shall—

"(1) conduct a field study of the ability of the PM<sub>2.5</sub> Federal Reference Method to differentiate those particles that are larger than 2.5 micrometers in diameter;

"(2) develop a Federal reference method to measure directly particles that are larger than 2.5 micrometers in diameter without reliance on subtracting from coarse particle measurements those particles that are equal to or smaller than 2.5 micrometers in diameter;

"(3) develop a method of measuring the composition of coarse particles; and

"(4) submit a report on the study and responsibilities of the Administrator under paragraphs (1) through (3) to—

"(A) the Committee on Energy and Commerce of the House of Representatives; and

"(B) the Committee on Environment and Public Works of the Senate.

#### "SEC. 6103. OZONE DESIGNATION REQUIREMENTS.

"(a) The Governors shall be required to submit the designations referred to in section 107(d)(1) of the Clean Air Act [42 U.S.C. 7407(d)(1)] within 2 years following the promulgation of the July 1997 ozone national ambient air quality standards.

"(b) The Administrator shall promulgate final designations no later than 1 year after the designations required under subsection (a) are required to be submitted.

#### "SEC. 6104. ADDITIONAL PROVISIONS.

"Nothing in sections 6101 through 6103 shall be construed by the Administrator of Environmental Protection Agency or any court, State, or person to affect any pending litigation or to be a ratification of the ozone or PM<sub>2.5</sub> standards."

#### PENDING ACTIONS AND PROCEEDINGS

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95-95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub. L. 95-95, see section 406(a) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

#### MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

#### § 7408. Air quality criteria and control techniques

##### (a) Air pollutant list; publication and revision by Administrator; issuance of air quality criteria for air pollutants

(1) For the purpose of establishing national primary and secondary ambient air quality standards, the Administrator shall within 30 days after December 31, 1970, publish, and shall from time to time thereafter revise, a list which includes each air pollutant—

(A) emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare;

(B) the presence of which in the ambient air results from numerous or diverse mobile or stationary sources; and

(C) for which air quality criteria had not been issued before December 31, 1970 but for which he plans to issue air quality criteria under this section.

(2) The Administrator shall issue air quality criteria for an air pollutant within 12 months after he has included such pollutant in a list



under paragraph (1). Air quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities. The criteria for an air pollutant, to the extent practicable, shall include information on—

(A) those variable factors (including atmospheric conditions) which of themselves or in combination with other factors may alter the effects on public health or welfare of such air pollutant;

(B) the types of air pollutants which, when present in the atmosphere, may interact with such pollutant to produce an adverse effect on public health or welfare; and

(C) any known or anticipated adverse effects on welfare.

**(b) Issuance by Administrator of information on air pollution control techniques; standing consulting committees for air pollutants; establishment; membership**

(1) Simultaneously with the issuance of criteria under subsection (a), the Administrator shall, after consultation with appropriate advisory committees and Federal departments and agencies, issue to the States and appropriate air pollution control agencies information on air pollution control techniques, which information shall include data relating to the cost of installation and operation, energy requirements, emission reduction benefits, and environmental impact of the emission control technology. Such information shall include such data as are available on available technology and alternative methods of prevention and control of air pollution. Such information shall also include data on alternative fuels, processes, and operating methods which will result in elimination or significant reduction of emissions.

(2) In order to assist in the development of information on pollution control techniques, the Administrator may establish a standing consulting committee for each air pollutant included in a list published pursuant to subsection (a)(1), which shall be comprised of technically qualified individuals representative of State and local governments, industry, and the academic community. Each such committee shall submit, as appropriate, to the Administrator information related to that required by paragraph (1).

**(c) Review, modification, and reissuance of criteria or information**

The Administrator shall from time to time review, and, as appropriate, modify, and reissue any criteria or information on control techniques issued pursuant to this section. Not later than six months after August 7, 1977, the Administrator shall revise and reissue criteria relating to concentrations of NO<sub>2</sub> over such period (not more than three hours) as he deems appropriate. Such criteria shall include a discussion of nitric and nitrous acids, nitrites, nitrates, nitrosamines, and other carcinogenic and potentially carcinogenic derivatives of oxides of nitrogen.

**(d) Publication in Federal Register; availability of copies for general public**

The issuance of air quality criteria and information on air pollution control techniques shall

be announced in the Federal Register and copies shall be made available to the general public.

**(e) Transportation planning and guidelines**

The Administrator shall, after consultation with the Secretary of Transportation, and after providing public notice and opportunity for comment, and with State and local officials, within nine months after November 15, 1990,<sup>1</sup> and periodically thereafter as necessary to maintain a continuous transportation-air quality planning process, update the June 1978 Transportation-Air Quality Planning Guidelines and publish guidance on the development and implementation of transportation and other measures necessary to demonstrate and maintain attainment of national ambient air quality standards. Such guidelines shall include information on—

(1) methods to identify and evaluate alternative planning and control activities;

(2) methods of reviewing plans on a regular basis as conditions change or new information is presented;

(3) identification of funds and other resources necessary to implement the plan, including interagency agreements on providing such funds and resources;

(4) methods to assure participation by the public in all phases of the planning process; and

(5) such other methods as the Administrator determines necessary to carry out a continuous planning process.

**(f) Information regarding processes, procedures, and methods to reduce or control pollutants in transportation; reduction of mobile source related pollutants; reduction of impact on public health**

(1) The Administrator shall publish and make available to appropriate Federal, State, and local environmental and transportation agencies not later than one year after November 15, 1990, and from time to time thereafter—

(A) information prepared, as appropriate, in consultation with the Secretary of Transportation, and after providing public notice and opportunity for comment, regarding the formulation and emission reduction potential of transportation control measures related to criteria pollutants and their precursors, including, but not limited to—

(i) programs for improved public transit;

(ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;

(iii) employer-based transportation management plans, including incentives;

(iv) trip-reduction ordinances;

(v) traffic flow improvement programs that achieve emission reductions;

(vi) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit service;

(vii) programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use;

(viii) programs for the provision of all forms of high-occupancy, shared-ride services;

<sup>1</sup> See Codification note below.

(ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;

(x) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;

(xi) programs to control extended idling of vehicles;

(xii) programs to reduce motor vehicle emissions, consistent with subchapter II, which are caused by extreme cold start conditions;

(xiii) employer-sponsored programs to permit flexible work schedules;

(xiv) programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single-occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;

(xv) programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For purposes of this clause, the Administrator shall also consult with the Secretary of the Interior; and

(xvi) program to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.<sup>2</sup>

(B) information on additional methods or strategies that will contribute to the reduction of mobile source related pollutants during periods in which any primary ambient air quality standard will be exceeded and during episodes for which an air pollution alert, warning, or emergency has been declared;

(C) information on other measures which may be employed to reduce the impact on public health or protect the health of sensitive or susceptible individuals or groups; and

(D) information on the extent to which any process, procedure, or method to reduce or control such air pollutant may cause an increase in the emissions or formation of any other pollutant.

(2) In publishing such information the Administrator shall also include an assessment of—

(A) the relative effectiveness of such processes, procedures, and methods;

(B) the potential effect of such processes, procedures, and methods on transportation systems and the provision of transportation services; and

(C) the environmental, energy, and economic impact of such processes, procedures, and methods.

**(g) Assessment of risks to ecosystems**

The Administrator may assess the risks to ecosystems from exposure to criteria air pollut-

ants (as identified by the Administrator in the Administrator's sole discretion).

**(h) RACT/BACT/LAER clearinghouse**

The Administrator shall make information regarding emission control technology available to the States and to the general public through a central database. Such information shall include all control technology information received pursuant to State plan provisions requiring permits for sources, including operating permits for existing sources.

(July 14, 1955, ch. 360, title I, § 108, as added Pub. L. 91-604, § 4(a), Dec. 31, 1970, 84 Stat. 1678; amended Pub. L. 95-95, title I, §§ 104, 105, title IV, § 401(a), Aug. 7, 1977, 91 Stat. 689, 790; Pub. L. 101-549, title I, §§ 108(a)-(c), (o), 111, Nov. 15, 1990, 104 Stat. 2465, 2466, 2469, 2470; Pub. L. 105-362, title XV, § 1501(b), Nov. 10, 1998, 112 Stat. 3294.)

**CODIFICATION**

November 15, 1990, referred to in subsec. (e), was in the original "enactment of the Clean Air Act Amendments of 1989", and was translated as meaning the date of the enactment of Pub. L. 101-549, popularly known as the Clean Air Act Amendments of 1990, to reflect the probable intent of Congress.

Section was formerly classified to section 1857c-3 of this title.

**PRIOR PROVISIONS**

A prior section 108 of act July 14, 1955, was renumbered section 115 by Pub. L. 91-604 and is classified to section 7415 of this title.

**AMENDMENTS**

1998—Subsec. (f)(3), (4). Pub. L. 105-362 struck out par. (3), which required reports by the Secretary of Transportation and the Administrator to be submitted to Congress by Jan. 1, 1993, and every 3 years thereafter, reviewing and analyzing existing State and local air quality related transportation programs, evaluating achievement of goals, and recommending changes to existing programs, and par. (4), which required that in each report after the first report the Secretary of Transportation include a description of the actions taken to implement the changes recommended in the preceding report.

1990—Subsec. (e). Pub. L. 101-549, § 108(a), inserted first sentence and struck out former first sentence which read as follows: "The Administrator shall, after consultation with the Secretary of Transportation and the Secretary of Housing and Urban Development and State and local officials and within 180 days after August 7, 1977, and from time to time thereafter, publish guidelines on the basic program elements for the planning process assisted under section 7505 of this title."

Subsec. (f)(1). Pub. L. 101-549, § 108(b), in introductory provisions, substituted present provisions for provisions relating to Federal agencies, States, and air pollution control agencies within either 6 months or one year after Aug. 7, 1977.

Subsec. (f)(1)(A). Pub. L. 101-549, § 108(b), substituted present provisions for provisions relating to information prepared in cooperation with Secretary of Transportation, regarding processes, procedures, and methods to reduce certain pollutants.

Subsec. (f)(3), (4). Pub. L. 101-549, § 111, added pars. (3) and (4).

Subsec. (g). Pub. L. 101-549, § 108(o), added subsec. (g).

Subsec. (h). Pub. L. 101-549, § 108(c), added subsec. (h). 1977—Subsec. (a)(1)(A). Pub. L. 95-95, § 401(a), substituted "emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare" for "which in his judgment has an adverse effect on public health or welfare".

<sup>2</sup> So in original. The period probably should be a semicolon.



Subsec. (b)(1). Pub. L. 95-95, §104(a), substituted "cost of installation and operation, energy requirements, emission reduction benefits, and environmental impact of the emission control technology" for "technology and costs of emission control".

Subsec. (c). Pub. L. 95-95, §104(b), inserted provision directing the Administrator, not later than six months after Aug. 7, 1977, to revise and reissue criteria relating to concentrations of NO<sub>2</sub> over such period (not more than three hours) as he deems appropriate, with the criteria to include a discussion of nitric and nitrous acids, nitrites, nitrates, nitrosamines, and other carcinogenic and potentially carcinogenic derivatives of oxides of nitrogen.

Subsecs. (e), (f). Pub. L. 95-95, §105, added subsecs. (e) and (f).

#### EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

#### MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 406(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

### § 7409. National primary and secondary ambient air quality standards

#### (a) Promulgation

##### (1) The Administrator—

(A) within 30 days after December 31, 1970, shall publish proposed regulations prescribing a national primary ambient air quality standard and a national secondary ambient air quality standard for each air pollutant for which air quality criteria have been issued prior to such date; and

(B) after a reasonable time for interested persons to submit written comments thereon (but no later than 90 days after the initial publication of such proposed standards) shall by regulation promulgate such proposed national primary and secondary ambient air quality standards with such modifications as he deems appropriate.

(2) With respect to any air pollutant for which air quality criteria are issued after December 31, 1970, the Administrator shall publish, simultaneously with the issuance of such criteria and information, proposed national primary and secondary ambient air quality standards for any such pollutant. The procedure provided for in paragraph (1)(B) of this subsection shall apply to the promulgation of such standards.

#### (b) Protection of public health and welfare

(1) National primary ambient air quality standards, prescribed under subsection (a) shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and

allowing an adequate margin of safety, are requisite to protect the public health. Such primary standards may be revised in the same manner as promulgated.

(2) Any national secondary ambient air quality standard prescribed under subsection (a) shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. Such secondary standards may be revised in the same manner as promulgated.

#### (c) National primary ambient air quality standard for nitrogen dioxide

The Administrator shall, not later than one year after August 7, 1977, promulgate a national primary ambient air quality standard for NO<sub>2</sub> concentrations over a period of not more than 3 hours unless, based on the criteria issued under section 7408(c) of this title, he finds that there is no significant evidence that such a standard for such a period is requisite to protect public health.

#### (d) Review and revision of criteria and standards; independent scientific review committee; appointment; advisory functions

(1) Not later than December 31, 1980, and at five-year intervals thereafter, the Administrator shall complete a thorough review of the criteria published under section 7408 of this title and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate in accordance with section 7408 of this title and subsection (b) of this section. The Administrator may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.

(2)(A) The Administrator shall appoint an independent scientific review committee composed of seven members including at least one member of the National Academy of Sciences, one physician, and one person representing State air pollution control agencies.

(B) Not later than January 1, 1980, and at five-year intervals thereafter, the committee referred to in subparagraph (A) shall complete a review of the criteria published under section 7408 of this title and the national primary and secondary ambient air quality standards promulgated under this section and shall recommend to the Administrator any new national ambient air quality standards and revisions of existing criteria and standards as may be appropriate under section 7408 of this title and subsection (b) of this section.

(C) Such committee shall also (i) advise the Administrator of areas in which additional knowledge is required to appraise the adequacy and basis of existing, new, or revised national ambient air quality standards, (ii) describe the research efforts necessary to provide the required information, (iii) advise the Administrator on the relative contribution to air pollution concentrations of natural as well as anthropogenic activity, and (iv) advise the Administrator of any adverse public health, welfare, so-

of the area as an attainment area. The failure of any area redesignated as an attainment area to maintain the national ambient air quality standard concerned shall not result in a requirement that the State revise its State implementation plan unless the Administrator, in the Administrator's discretion, requires the State to submit a revised State implementation plan.

(July 14, 1955, ch. 360, title I, §175A, as added Pub. L. 101-549, title I, §102(e), Nov. 15, 1990, 104 Stat. 2418.)

**§ 7506. Limitations on certain Federal assistance**

(a), (b) **Repealed.** Pub. L. 101-549, title I, § 110(4), Nov. 15, 1990, 104 Stat. 2470

**(c) Activities not conforming to approved or promulgated plans**

(1) No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved or promulgated under section 7410 of this title. No metropolitan planning organization designated under section 134 of title 23, shall give its approval to any project, program, or plan which does not conform to an implementation plan approved or promulgated under section 7410 of this title. The assurance of conformity to such an implementation plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality. Conformity to an implementation plan means—

(A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

(B) that such activities will not—

(i) cause or contribute to any new violation of any standard in any area;

(ii) increase the frequency or severity of any existing violation of any standard in any area; or

(iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

The determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel and congestion estimates as determined by the metropolitan planning organization or other agency authorized to make such estimates.

(2) Any transportation plan or program developed pursuant to title 23 or chapter 53 of title 49 shall implement the transportation provisions of any applicable implementation plan approved under this chapter applicable to all or part of the area covered by such transportation plan or program. No Federal agency may approve, accept or fund any transportation plan, program or project unless such plan, program or project has been found to conform to any applicable implementation plan in effect under this chapter. In particular—

(A) no transportation plan or transportation improvement program may be adopted by a

metropolitan planning organization designated under title 23 or chapter 53 of title 49, or be found to be in conformity by a metropolitan planning organization until a final determination has been made that emissions expected from implementation of such plans and programs are consistent with estimates of emissions from motor vehicles and necessary emissions reductions contained in the applicable implementation plan, and that the plan or program will conform to the requirements of paragraph (1)(B);

(B) no metropolitan planning organization or other recipient of funds under title 23 or chapter 53 of title 49 shall adopt or approve a transportation improvement program of projects until it determines that such program provides for timely implementation of transportation control measures consistent with schedules included in the applicable implementation plan;

(C) a transportation project may be adopted or approved by a metropolitan planning organization or any recipient of funds designated under title 23 or chapter 53 of title 49, or found in conformity by a metropolitan planning organization or approved, accepted, or funded by the Department of Transportation only if it meets either the requirements of subparagraph (D) or the following requirements—

(i) such a project comes from a conforming plan and program;

(ii) the design concept and scope of such project have not changed significantly since the conformity finding regarding the plan and program from which the project derived; and

(iii) the design concept and scope of such project at the time of the conformity determination for the program was adequate to determine emissions.

(D) Any project not referred to in subparagraph (C) shall be treated as conforming to the applicable implementation plan only if it is demonstrated that the projected emissions from such project, when considered together with emissions projected for the conforming transportation plans and programs within the nonattainment area, do not cause such plans and programs to exceed the emission reduction projections and schedules assigned to such plans and programs in the applicable implementation plan.

(E) The appropriate metropolitan planning organization shall redetermine conformity of existing transportation plans and programs not later than 2 years after the date on which the Administrator—

(i) finds a motor vehicle emissions budget to be adequate in accordance with section 93.118(e)(4) of title 40, Code of Federal Regulations (as in effect on October 1, 2004);

(ii) approves an implementation plan that establishes a motor vehicle emissions budget if that budget has not yet been determined to be adequate in accordance with clause (i); or

(iii) promulgates an implementation plan that establishes or revises a motor vehicle emissions budget.



(3) Until such time as the implementation plan revision referred to in paragraph (4)(C)<sup>1</sup> is approved, conformity of such plans, programs, and projects will be demonstrated if—

(A) the transportation plans and programs—

- (i) are consistent with the most recent estimates of mobile source emissions;
- (ii) provide for the expeditious implementation of transportation control measures in the applicable implementation plan; and
- (iii) with respect to ozone and carbon monoxide nonattainment areas, contribute to annual emissions reductions consistent with sections 7511a(b)(1) and 7512a(a)(7) of this title; and

(B) the transportation projects—

(i) come from a conforming transportation plan and program as defined in subparagraph (A) or for 12 months after November 15, 1990, from a transportation program found to conform within 3 years prior to November 15, 1990; and

(ii) in carbon monoxide nonattainment areas, eliminate or reduce the severity and number of violations of the carbon monoxide standards in the area substantially affected by the project.

With regard to subparagraph (B)(ii), such determination may be made as part of either the conformity determination for the transportation program or for the individual project taken as a whole during the environmental review phase of project development.

#### (4) CRITERIA AND PROCEDURES FOR DETERMINING CONFORMITY.—

(A) IN GENERAL.—The Administrator shall promulgate, and periodically update, criteria and procedures for determining conformity (except in the case of transportation plans, programs, and projects) of, and for keeping the Administrator informed about, the activities referred to in paragraph (1).

(B) TRANSPORTATION PLANS, PROGRAMS, AND PROJECTS.—The Administrator, with the concurrence of the Secretary of Transportation, shall promulgate, and periodically update, criteria and procedures for demonstrating and assuring conformity in the case of transportation plans, programs, and projects.

(C) CIVIL ACTION TO COMPEL PROMULGATION.—A civil action may be brought against the Administrator and the Secretary of Transportation under section 7604 of this title to compel promulgation of such criteria and procedures and the Federal district court shall have jurisdiction to order such promulgation.

(D) The procedures and criteria shall, at a minimum—

(i) address the consultation procedures to be undertaken by metropolitan planning organizations and the Secretary of Transportation with State and local air quality agencies and State departments of transportation before such organizations and the Secretary make conformity determinations;

(ii) address the appropriate frequency for making conformity determinations, but the frequency for making conformity determina-

tions on updated transportation plans and programs shall be every 4 years, except in a case in which—

(I) the metropolitan planning organization elects to update a transportation plan or program more frequently; or

(II) the metropolitan planning organization is required to determine conformity in accordance with paragraph (2)(E); and

(iii) address how conformity determinations will be made with respect to maintenance plans.

(E) INCLUSION OF CRITERIA AND PROCEDURES IN SIP.—Not later than 2 years after August 10, 2005, the procedures under subparagraph (A) shall include a requirement that each State include in the State implementation plan criteria and procedures for consultation required by subparagraph (D)(i), and enforcement and enforceability (pursuant to sections 93.125(c) and 93.122(a)(4)(ii) of title 40, Code of Federal Regulations) in accordance with the Administrator's criteria and procedures for consultation, enforcement and enforceability.

(F) Compliance with the rules of the Administrator for determining the conformity of transportation plans, programs, and projects funded or approved under title 23 or chapter 53 of title 49 to State or Federal implementation plans shall not be required for traffic signal synchronization projects prior to the funding, approval or implementation of such projects. The supporting regional emissions analysis for any conformity determination made with respect to a transportation plan, program, or project shall consider the effect on emissions of any such project funded, approved, or implemented prior to the conformity determination.

(5) APPLICABILITY.—This subsection shall apply only with respect to—

(A) a nonattainment area and each pollutant for which the area is designated as a nonattainment area; and

(B) an area that was designated as a nonattainment area but that was later redesignated by the Administrator as an attainment area and that is required to develop a maintenance plan under section 7505a of this title with respect to the specific pollutant for which the area was designated nonattainment.

(6) Notwithstanding paragraph 5,<sup>2</sup> this subsection shall not apply with respect to an area designated nonattainment under section 7407(d)(1) of this title until 1 year after that area is first designated nonattainment for a specific national ambient air quality standard. This paragraph only applies with respect to the national ambient air quality standard for which an area is newly designated nonattainment and does not affect the area's requirements with respect to all other national ambient air quality standards for which the area is designated nonattainment or has been redesignated from nonattainment to attainment with a maintenance plan pursuant to section 7505a<sup>1</sup> of this title (including any pre-existing national ambient air

<sup>1</sup> See References in Text note below.

<sup>2</sup> So in original. Probably should be "paragraph (5)".

quality standard for a pollutant for which a new or revised standard has been issued).

(7) CONFORMITY HORIZON FOR TRANSPORTATION PLANS.—

(A) IN GENERAL.—Each conformity determination required under this section for a transportation plan under section 134(i) of title 23 or section 5303(i) of title 49 shall require a demonstration of conformity for the period ending on either the final year of the transportation plan, or at the election of the metropolitan planning organization, after consultation with the air pollution control agency and solicitation of public comments and consideration of such comments, the longest of the following periods:

(i) The first 10-year period of any such transportation plan.

(ii) The latest year in the implementation plan applicable to the area that contains a motor vehicle emission budget.

(iii) The year after the completion date of a regionally significant project if the project is included in the transportation improvement program or the project requires approval before the subsequent conformity determination.

(B) REGIONAL EMISSIONS ANALYSIS.—The conformity determination shall be accompanied by a regional emissions analysis for the last year of the transportation plan and for any year shown to exceed emission budgets by a prior analysis, if such year extends beyond the applicable period as determined under subparagraph (A).

(C) EXCEPTION.—In any case in which an area has a revision to an implementation plan under section 7505a(b) of this title and the Administrator has found the motor vehicles emissions budgets from that revision to be adequate in accordance with section 93.118(e)(4) of title 40, Code of Federal Regulations (as in effect on October 1, 2004), or has approved the revision, the demonstration of conformity at the election of the metropolitan planning organization, after consultation with the air pollution control agency and solicitation of public comments and consideration of such comments, shall be required to extend only through the last year of the implementation plan required under section 7505a(b) of this title.

(D) EFFECT OF ELECTION.—Any election by a metropolitan planning organization under this paragraph shall continue in effect until the metropolitan planning organization elects otherwise.

(E) AIR POLLUTION CONTROL AGENCY DEFINED.—In this paragraph, the term “air pollution control agency” means an air pollution control agency (as defined in section 7602(b) of this title) that is responsible for developing plans or controlling air pollution within the area covered by a transportation plan.

(8) SUBSTITUTION OF TRANSPORTATION CONTROL MEASURES.—

(A) IN GENERAL.—Transportation control measures that are specified in an implementation plan may be replaced or added to the implementation plan with alternate or additional transportation control measures—

(i) if the substitute measures achieve equivalent or greater emissions reductions than the control measure to be replaced, as demonstrated with an emissions impact analysis that is consistent with the current methodology used for evaluating the replaced control measure in the implementation plan;

(ii) if the substitute control measures are implemented—

(I) in accordance with a schedule that is consistent with the schedule provided for control measures in the implementation plan; or

(II) if the implementation plan date for implementation of the control measure to be replaced has passed, as soon as practicable after the implementation plan date but not later than the date on which emission reductions are necessary to achieve the purpose of the implementation plan;

(iii) if the substitute and additional control measures are accompanied with evidence of adequate personnel and funding and authority under State or local law to implement, monitor, and enforce the control measures;

(iv) if the substitute and additional control measures were developed through a collaborative process that included—

(I) participation by representatives of all affected jurisdictions (including local air pollution control agencies, the State air pollution control agency, and State and local transportation agencies);

(II) consultation with the Administrator; and

(III) reasonable public notice and opportunity for comment; and

(v) if the metropolitan planning organization, State air pollution control agency, and the Administrator concur with the equivalency of the substitute or additional control measures.

(B) ADOPTION.—(i) Concurrence by the metropolitan planning organization, State air pollution control agency and the Administrator as required by subparagraph (A)(v) shall constitute adoption of the substitute or additional control measures so long as the requirements of subparagraphs (A)(i), (A)(ii), (A)(iii) and (A)(iv) are met.

(ii) Once adopted, the substitute or additional control measures become, by operation of law, part of the State implementation plan and become federally enforceable.

(iii) Within 90 days of its concurrence under subparagraph (A)(v), the State air pollution control agency shall submit the substitute or additional control measure to the Administrator for incorporation in the codification of the applicable implementation plan. Notwithstanding<sup>3</sup> any other provision of this chapter, no additional State process shall be necessary to support such revision to the applicable plan.

(C) NO REQUIREMENT FOR EXPRESS PERMISSION.—The substitution or addition of a trans-

<sup>3</sup> So in original. Probably should be “Notwithstanding”.



## § 7506

## TITLE 42—THE PUBLIC HEALTH AND WELFARE

Page 6450

portation control measure in accordance with this paragraph and the funding or approval of such a control measure shall not be contingent on the existence of any provision in the applicable implementation plan that expressly permits such a substitution or addition.

(D) NO REQUIREMENT FOR NEW CONFORMITY DETERMINATION.—The substitution or addition of a transportation control measure in accordance with this paragraph shall not require—

- (i) a new conformity determination for the transportation plan; or
- (ii) a revision of the implementation plan.

(E) CONTINUATION OF CONTROL MEASURE BEING REPLACED.—A control measure that is being replaced by a substitute control measure under this paragraph shall remain in effect until the substitute control measure is adopted by the State pursuant to subparagraph (B).

(F) EFFECT OF ADOPTION.—Adoption of a substitute control measure shall constitute rescission of the previously applicable control measure.

(9) LAPSE OF CONFORMITY.—If a conformity determination required under this subsection for a transportation plan under section 134(i) of title 23 or section 5303(i) of title 49 or a transportation improvement program under section 134(j) of such title 23 or under section 5303(j) of such title 49 is not made by the applicable deadline and such failure is not corrected by additional measures to either reduce motor vehicle emissions sufficient to demonstrate compliance with the requirements of this subsection within 12 months after such deadline or other measures sufficient to correct such failures, the transportation plan shall lapse.

(10) LAPSE.—In this subsection, the term “lapse” means that the conformity determination for a transportation plan or transportation improvement program has expired, and thus there is no currently conforming transportation plan or transportation improvement program.

**(d) Priority of achieving and maintaining national primary ambient air quality standards**

Each department, agency, or instrumentality of the Federal Government having authority to conduct or support any program with air-quality related transportation consequences shall give priority in the exercise of such authority, consistent with statutory requirements for allocation among States or other jurisdictions, to the implementation of those portions of plans prepared under this section to achieve and maintain the national primary ambient air-quality standard. This paragraph extends to, but is not limited to, authority exercised under chapter 53 of title 49, title 23, and the Housing and Urban Development Act.

(July 14, 1955, ch. 360, title I, § 176, as added Pub. L. 95–95, title I, § 129(b), Aug. 7, 1977, 91 Stat. 749; amended Pub. L. 95–190, § 14(a)(59), Nov. 16, 1977, 91 Stat. 1403; Pub. L. 101–549, title I, §§ 101(f), 110(4), Nov. 15, 1990, 104 Stat. 2409, 2470; Pub. L. 104–59, title III, § 305(b), Nov. 28, 1995, 109 Stat. 580; Pub. L. 104–260, § 1, Oct. 9, 1996, 110 Stat. 3175; Pub. L. 106–377, § 1(a)(1) [title III], Oct. 27, 2000, 114 Stat. 1441, 1441A–44; Pub. L. 109–59, title VI, § 6011(a)–(f), Aug. 10, 2005, 119 Stat. 1878–1881.)

## REFERENCES IN TEXT

Paragraph (4) of subsec. (c), referred to in subsec. (c)(3), was amended by Pub. L. 109–59, title VI, § 6011(f), Aug. 10, 2005, 119 Stat. 1881, to redesignate subpar. (C) as (E), strike it out, and add new subpars. (C) and (E). See 2005 Amendment notes below.

Section 7505a of this title, referred to in subsec. (c)(6), was in the original “section 175(A)” and was translated as reading “section 175A”, meaning section 175A of act July 14, 1955, which is classified to section 7505a of this title, to reflect the probable intent of Congress.

The Housing and Urban Development Act, referred to in subsec. (d), may be the name for a series of acts sharing the same name but enacted in different years by Pub. L. 89–117, Aug. 10, 1965, 79 Stat. 451; Pub. L. 90–448, Aug. 1, 1968, 82 Stat. 476; Pub. L. 91–152, Dec. 24, 1969, 83 Stat. 379; and Pub. L. 91–609, Dec. 31, 1970, 84 Stat. 1770, respectively. For complete classification of these Acts to the Code, see Short Title notes set out under section 1701 of Title 12, Banks and Banking, and Tables.

## CODIFICATION

In subsecs. (c)(2) and (d), “chapter 53 of title 49” substituted for “the Urban Mass Transportation Act [49 App. U.S.C. 1601 et seq.]” and in subsec. (c)(4)(F) substituted for “Federal Transit Act” on authority of Pub. L. 103–272, § 6(b), July 5, 1994, 108 Stat. 1378 (the first section of which enacted subtitles II, III, and V to X of Title 49, Transportation), and of Pub. L. 102–240, title III, § 3003(b), Dec. 18, 1991, 105 Stat. 2088, which provided that references in laws to the Urban Mass Transportation Act of 1964 be deemed to be references to the Federal Transit Act.

## AMENDMENTS

2005—Subsec. (c)(2)(E). Pub. L. 109–59, § 6011(a), added subpar. (E).

Subsec. (c)(4). Pub. L. 109–59, § 6011(f)(1)–(3), inserted par. (4) and subpar. (A) headings, in first sentence substituted “The Administrator shall promulgate, and periodically update,” for “No later than one year after November 15, 1990, the Administrator shall promulgate”, designated second sentence as subpar. (B), inserted heading, substituted “The Administrator, with the concurrence of the Secretary of Transportation, shall promulgate, and periodically update,” for “No later than one year after November 15, 1990, the Administrator, with the concurrence of the Secretary of Transportation, shall promulgate”, designated third sentence as subpar. (C), inserted heading, substituted “A civil action” for “A suit”, and redesignated former subpars. (B) to (D) as (D) to (F), respectively.

Subsec. (c)(4)(B)(ii). Pub. L. 109–59, § 6011(b), amended cl. (ii) generally. Prior to amendment, cl. (ii) read as follows: “address the appropriate frequency for making conformity determinations, but in no case shall such determinations for transportation plans and programs be less frequent than every three years; and”.

Subsec. (c)(4)(E). Pub. L. 109–59, § 6011(f)(4), added subpar. (E) and struck out former subpar. (E) which read as follows: “Such procedures shall also include a requirement that each State shall submit to the Administrator and the Secretary of Transportation within 24 months of November 15, 1990, a revision to its implementation plan that includes criteria and procedures for assessing the conformity of any plan, program, or project subject to the conformity requirements of this subsection.”

Subsec. (c)(7) to (10). Pub. L. 109–59, § 6011(c)–(e), added pars. (7) to (10).

2000—Subsec. (c)(6). Pub. L. 106–377 added par. (6).

1996—Subsec. (c)(4)(D). Pub. L. 104–260 added subpar. (D).

1995—Subsec. (c)(5). Pub. L. 104–59 added par. (5).

1990—Subsecs. (a), (b). Pub. L. 101–549, § 110(4), struck out subsec. (a) which related to approval of projects or award of grants, and subsec. (b) which related to implementation of approved or promulgated plans.

Subsec. (c). Pub. L. 101–549, § 101(f), designated existing provisions as par. (1), struck out “(1)”, “(2)”, “(3)”,

and “(4)” before “engage in”, “support in”, “license or”, and “approve, any”, respectively, substituted “conform to an implementation plan after it” for “conform to a plan after it”, “conform to an implementation plan approved” for “conform to a plan approved”, and “conformity to such an implementation plan shall” for “conformity to such a plan shall”, inserted “Conformity to an implementation plan means—” followed immediately by subpars. (A) and (B) and closing provisions relating to determination of conformity being based on recent estimates of emissions and the determination of such estimates, and added pars. (2) to (4).

1977—Subsec. (a)(1). Pub. L. 95-190 inserted “national” before “primary”.

#### REGULATIONS

Pub. L. 109-59, title VI, § 6011(g), Aug. 10, 2005, 119 Stat. 1882, provided that: “Not later than 2 years after the date of enactment of this Act [Aug. 10, 2005], the Administrator of the Environmental Protection Agency shall promulgate revised regulations to implement the changes made by this section [amending this section].”

#### § 7506a. Interstate transport commissions

##### (a) Authority to establish interstate transport regions

Whenever, on the Administrator's own motion or by petition from the Governor of any State, the Administrator has reason to believe that the interstate transport of air pollutants from one or more States contributes significantly to a violation of a national ambient air quality standard in one or more other States, the Administrator may establish, by rule, a transport region for such pollutant that includes such States. The Administrator, on the Administrator's own motion or upon petition from the Governor of any State, or upon the recommendation of a transport commission established under subsection (b), may—

(1) add any State or portion of a State to any region established under this subsection whenever the Administrator has reason to believe that the interstate transport of air pollutants from such State significantly contributes to a violation of the standard in the transport region, or

(2) remove any State or portion of a State from the region whenever the Administrator has reason to believe that the control of emissions in that State or portion of the State pursuant to this section will not significantly contribute to the attainment of the standard in any area in the region.

The Administrator shall approve or disapprove any such petition or recommendation within 18 months of its receipt. The Administrator shall establish appropriate proceedings for public participation regarding such petitions and motions, including notice and comment.

##### (b) Transport commissions

###### (1) Establishment

Whenever the Administrator establishes a transport region under subsection (a), the Administrator shall establish a transport commission comprised of (at a minimum) each of the following members:

(A) The Governor of each State in the region or the designee of each such Governor.

(B) The Administrator or the Administrator's designee.

(C) The Regional Administrator (or the Administrator's designee) for each Regional Office for each Environmental Protection Agency Region affected by the transport region concerned.

(D) An air pollution control official representing each State in the region, appointed by the Governor.

Decisions of, and recommendations and requests to, the Administrator by each transport commission may be made only by a majority vote of all members other than the Administrator and the Regional Administrators (or designees thereof).

##### (2) Recommendations

The transport commission shall assess the degree of interstate transport of the pollutant or precursors to the pollutant throughout the transport region, assess strategies for mitigating the interstate pollution, and recommend to the Administrator such measures as the Commission determines to be necessary to ensure that the plans for the relevant States meet the requirements of section 7410(a)(2)(D) of this title. Such commission shall not be subject to the provisions of the Federal Advisory Committee Act (5 U.S.C. App.).

##### (c) Commission requests

A transport commission established under subsection (b) may request the Administrator to issue a finding under section 7410(k)(5) of this title that the implementation plan for one or more of the States in the transport region is substantially inadequate to meet the requirements of section 7410(a)(2)(D) of this title. The Administrator shall approve, disapprove, or partially approve and partially disapprove such a request within 18 months of its receipt and, to the extent the Administrator approves such request, issue the finding under section 7410(k)(5) of this title at the time of such approval. In acting on such request, the Administrator shall provide an opportunity for public participation and shall address each specific recommendation made by the commission. Approval or disapproval of such a request shall constitute final agency action within the meaning of section 7607(b) of this title.

(July 14, 1955, ch. 360, title I, § 176A, as added Pub. L. 101-549, title I, § 102(f)(1), Nov. 15, 1990, 104 Stat. 2419.)

#### REFERENCES IN TEXT

The Federal Advisory Committee Act, referred to in subsec. (b)(2), is Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 770, as amended, which is set out in the Appendix to Title 5, Government Organization and Employees.

#### § 7507. New motor vehicle emission standards in nonattainment areas

Notwithstanding section 7543(a) of this title, any State which has plan provisions approved under this part may adopt and enforce for any model year standards relating to control of emissions from new motor vehicles or new motor vehicle engines and take such other actions as are referred to in section 7543(a) of this title respecting such vehicles if—



## Pt. 50, App. U

## 40 CFR Ch. I (7-1-18 Edition)

4. ROUNDING CONVENTIONS FOR THE 1-HOUR  
PRIMARY SO<sub>2</sub> NAAQS

(a) Hourly SO<sub>2</sub> measurement data shall be reported to AQS in units of parts per billion (ppb), to at most one place after the decimal, with additional digits to the right being truncated with no further rounding.

(b) Daily maximum 1-hour values and therefore the annual 99th percentile of those daily values are not rounded.

(c) The 1-hour primary standard design value is calculated pursuant to section 5 and then rounded to the nearest whole number or 1 ppb (decimals 0.5 and greater are rounded up to the nearest whole number, and any decimal lower than 0.5 is rounded down to the nearest whole number).

5. CALCULATION PROCEDURES FOR THE 1-HOUR  
PRIMARY SO<sub>2</sub> NAAQS

(a) *Procedure for identifying annual 99th percentile values.* When the data for a particular ambient air quality monitoring site and year meet the data completeness requirements in section 3(b), or if one of the conditions of section 3(c) is met, or if the Administrator exercises the discretionary authority in section 3(d), identification of annual 99th percentile value is accomplished as follows.

(i) The annual 99th percentile value for a year is the higher of the two values resulting from the following two procedures.

(1) *Procedure 1.* For the year, determine the number of days with at least 75 percent of the hourly values reported.

(A) For the year, determine the number of days with at least 75 percent of the hourly values reported including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator.

(B) For the year, from only the days with at least 75 percent of the hourly values reported, select from each day the maximum hourly value excluding State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator.

(C) Sort all these daily maximum hourly values from a particular site and year by descending value. (For example: (x[1], x[2], x[3], \* \* \*, x[n]). In this case, x[1] is the largest number and x[n] is the smallest value.) The 99th percentile is determined from this sorted series of daily values which is ordered from the highest to the lowest number. Using the left column of Table 1, determine the appropriate range (i.e., row) for the annual number of days with valid data for year y (cn<sub>y</sub>). The corresponding "n" value in the right column identifies the rank of the annual 99th percentile value in the descending sorted list of daily site values for year y. Thus, P<sub>0.99,y</sub> = the nth largest value.

(2) *Procedure 2.* For the year, determine the number of days with at least one hourly value reported.

(A) For the year, determine the number of days with at least one hourly value reported including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator.

(B) For the year, from all the days with at least one hourly value reported, select from each day the maximum hourly value excluding State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator.

(C) Sort all these daily maximum values from a particular site and year by descending value. (For example: (x[1], x[2], x[3], \* \* \*, x[n]). In this case, x[1] is the largest number and x[n] is the smallest value.) The 99th percentile is determined from this sorted series of daily values which is ordered from the highest to the lowest number. Using the left column of Table 1, determine the appropriate range (i.e., row) for the annual number of days with valid data for year y (cn<sub>y</sub>). The corresponding "n" value in the right column identifies the rank of the annual 99th percentile value in the descending sorted list of daily site values for year y. Thus, P<sub>0.99,y</sub> = the nth largest value.

(b) The 1-hour primary standard design value for an ambient air quality monitoring site is mean of the three annual 99th percentile values, rounded according to the conventions in section 4.

TABLE 1

Annual number of days with valid data for year "y" (cn <sub>y</sub> )	P <sub>0.99,y</sub> is the nth maximum value of the year, where n is the listed number
1-100	1
101-200	2
201-300	3
301-366	4

[75 FR 35595, June 23, 2010]

## APPENDIX U TO PART 50—INTERPRETATION OF THE PRIMARY AND SECONDARY NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE

## 1. GENERAL

(a) This appendix explains the data handling conventions and computations necessary for determining whether the primary and secondary national ambient air quality standards (NAAQS) for ozone (O<sub>3</sub>) specified in §50.19 are met at an ambient O<sub>3</sub> air quality monitoring site. Data reporting, data handling, and computation procedures to be used in making comparisons between reported O<sub>3</sub> concentrations and the levels of the O<sub>3</sub> NAAQS are specified in the following sections.

(b) Whether to exclude or retain the data affected by exceptional events is determined

## Environmental Protection Agency

## Pt. 50, App. U

by the requirements under §§50.1, 50.14 and 51.930.

(c) The terms used in this appendix are defined as follows:

*8-hour average* refers to the moving average of eight consecutive hourly O<sub>3</sub> concentrations measured at a site, as explained in section 3 of this appendix.

*Annual fourth-highest daily maximum* refers to the fourth highest value measured at a site during a year.

*Collocated monitors* refers to the instance of two or more O<sub>3</sub> monitors operating at the same physical location.

*Daily maximum 8-hour average O<sub>3</sub> concentration* refers to the maximum calculated 8-hour average value measured at a site on a particular day, as explained in section 3 of this appendix.

*Design value* refers to the metric (i.e., statistic) that is used to compare ambient O<sub>3</sub> concentration data measured at a site to the NAAQS in order to determine compliance, as explained in section 4 of this appendix.

*Minimum data completeness requirements* refer to the amount of data that a site is required to collect in order to make a valid determination that the site is meeting the NAAQS.

*Monitor* refers to a physical instrument used to measure ambient O<sub>3</sub> concentrations.

*O<sub>3</sub> monitoring season* refers to the span of time within a year when individual states are required to measure ambient O<sub>3</sub> concentrations, as listed in Appendix D to part 58 of this chapter.

*Site* refers to an ambient O<sub>3</sub> air quality monitoring site.

*Site data record* refers to the set of hourly O<sub>3</sub> concentration data collected at a site for use in comparisons with the NAAQS.

*Year* refers to calendar year.

## 2. SELECTION OF DATA FOR USE IN COMPARISONS WITH THE PRIMARY AND SECONDARY OZONE NAAQS

(a) All valid hourly O<sub>3</sub> concentration data collected using a federal reference method specified in Appendix D to this part, or an equivalent method designated in accordance with part 53 of this chapter, meeting all applicable requirements in part 58 of this chapter, and submitted to EPA's Air Quality System (AQS) database or otherwise available to EPA, shall be used in design value calculations.

(b) All design value calculations shall be implemented on a site-level basis. If data are reported to EPA from collocated monitors, those data shall be combined into a single site data record as follows:

(i) The monitoring agency shall designate one monitor as the primary monitor for the site.

(ii) Hourly O<sub>3</sub> concentration data from a secondary monitor shall be substituted into the site data record whenever a valid hourly

O<sub>3</sub> concentration is not obtained from the primary monitor. In the event that hourly O<sub>3</sub> concentration data are available for more than one secondary monitor, the hourly concentration values from the secondary monitors shall be averaged and substituted into the site data record.

(c) In certain circumstances, including but not limited to site closures or relocations, data from two nearby sites may be combined into a single site data record for the purpose of calculating a valid design value. The appropriate Regional Administrator may approve such combinations after taking into consideration factors such as distance between sites, spatial and temporal patterns in air quality, local emissions and meteorology, jurisdictional boundaries, and terrain features.

## 3. DATA REPORTING AND DATA HANDLING CONVENTIONS

(a) Hourly average O<sub>3</sub> concentrations shall be reported in parts per million (ppm) to the third decimal place, with additional digits to the right of the third decimal place truncated. Each hour shall be identified using local standard time (LST).

(b) Moving 8-hour averages shall be computed from the hourly O<sub>3</sub> concentration data for each hour of the year and shall be stored in the first, or start, hour of the 8-hour period. An 8-hour average shall be considered valid if at least 6 of the hourly concentrations for the 8-hour period are available. In the event that only 6 or 7 hourly concentrations are available, the 8-hour average shall be computed on the basis of the hours available, using 6 or 7, respectively, as the divisor. In addition, in the event that 5 or fewer hourly concentrations are available, the 8-hour average shall be considered valid if, after substituting zero for the missing hourly concentrations, the resulting 8-hour average is greater than the level of the NAAQS, or equivalently, if the sum of the available hourly concentrations is greater than 0.567 ppm. The 8-hour averages shall be reported to three decimal places, with additional digits to the right of the third decimal place truncated. Hourly O<sub>3</sub> concentrations that have been approved under §50.14 as having been affected by exceptional events shall be counted as missing or unavailable in the calculation of 8-hour averages.

(c) The daily maximum 8-hour average O<sub>3</sub> concentration for a given day is the highest of the 17 consecutive 8-hour averages beginning with the 8-hour period from 7:00 a.m. to 3:00 p.m. and ending with the 8-hour period from 11:00 p.m. to 7:00 a.m. the following day (i.e., the 8-hour averages for 7:00 a.m. to 11:00 p.m.). Daily maximum 8-hour average O<sub>3</sub> concentrations shall be determined for each day with ambient O<sub>3</sub> monitoring data, including days outside the O<sub>3</sub> monitoring season if those data are available.

## Pt. 50, App. U

## 40 CFR Ch. I (7-1-18 Edition)

(d) A daily maximum 8-hour average O<sub>3</sub> concentration shall be considered valid if valid 8-hour averages are available for at least 13 of the 17 consecutive 8-hour periods starting from 7:00 a.m. to 11:00 p.m. In addition, in the event that fewer than 13 valid 8-hour averages are available, a daily maximum 8-hour average O<sub>3</sub> concentration shall also be considered valid if it is greater than the level of the NAAQS. Hourly O<sub>3</sub> concentrations that have been approved under § 50.14 as having been affected by exceptional events shall be included when determining whether these criteria have been met.

(e) The primary and secondary O<sub>3</sub> design value statistic is the annual fourth-highest daily maximum 8-hour O<sub>3</sub> concentration, averaged over three years, expressed in ppm. The fourth-highest daily maximum 8-hour O<sub>3</sub> concentration for each year shall be determined based only on days meeting the validity criteria in 3(d). The 3-year average shall be computed using the three most recent, consecutive years of ambient O<sub>3</sub> monitoring data. Design values shall be reported in ppm to three decimal places, with additional digits to the right of the third decimal place truncated.

#### 4. COMPARISONS WITH THE PRIMARY AND SECONDARY OZONE NAAQS

(a) The primary and secondary national ambient air quality standards for O<sub>3</sub> are met

at an ambient air quality monitoring site when the 3-year average of the annual fourth-highest daily maximum 8-hour average O<sub>3</sub> concentration (i.e., the design value) is less than or equal to 0.070 ppm.

(b) A design value greater than the level of the NAAQS is always considered to be valid. A design value less than or equal to the level of the NAAQS must meet minimum data completeness requirements in order to be considered valid. These requirements are met for a 3-year period at a site if valid daily maximum 8-hour average O<sub>3</sub> concentrations are available for at least 90% of the days within the O<sub>3</sub> monitoring season, on average, for the 3-year period, with a minimum of at least 75% of the days within the O<sub>3</sub> monitoring season in any one year.

(c) When computing whether the minimum data completeness requirements have been met, meteorological or ambient data may be sufficient to demonstrate that meteorological conditions on missing days were not conducive to concentrations above the level of the NAAQS. Missing days assumed less than the level of the NAAQS are counted for the purpose of meeting the minimum data completeness requirements, subject to the approval of the appropriate Regional Administrator.

(d) Comparisons with the primary and secondary O<sub>3</sub> NAAQS are demonstrated by examples 1 and 2 as follows:

EXAMPLE 1—SITE MEETING THE PRIMARY AND SECONDARY O<sub>3</sub> NAAQS

Year	Percent valid days within O <sub>3</sub> monitoring season (Data completeness)	1st highest daily max 8-hour O <sub>3</sub> (ppm)	2nd highest daily max 8-hour O <sub>3</sub> (ppm)	3rd highest daily max 8-hour O <sub>3</sub> (ppm)	4th highest daily max 8-hour O <sub>3</sub> (ppm)	5th highest daily max 8-hour O <sub>3</sub> (ppm)
2014	100	0.082	0.080	0.075	0.069	0.068
2015	96	0.074	0.073	0.065	0.062	0.060
2016	98	0.070	0.069	0.067	0.066	0.060
Average	98				0.065	

As shown in Example 1, this site meets the primary and secondary O<sub>3</sub> NAAQS because the 3-year average of the annual fourth-highest daily maximum 8-hour average O<sub>3</sub> concentrations (i.e., 0.065666 ppm, truncated to 0.065 ppm) is less than or equal to 0.070 ppm. The minimum data completeness require-

ments are also met (i.e., design value is considered valid) because the average percent of days within the O<sub>3</sub> monitoring season with valid ambient monitoring data is greater than 90%, and no single year has less than 75% data completeness.

EXAMPLE 2—SITE FAILING TO MEET THE PRIMARY AND SECONDARY O<sub>3</sub> NAAQS

Year	Percent valid days within O <sub>3</sub> monitoring season (Data completeness)	1st highest daily max 8-hour O <sub>3</sub> (ppm)	2nd highest daily max 8-hour O <sub>3</sub> (ppm)	3rd highest daily max 8-hour O <sub>3</sub> (ppm)	4th highest daily max 8-hour O <sub>3</sub> (ppm)	5th highest daily max 8-hour O <sub>3</sub> (ppm)
2014	96	0.085	0.080	0.079	0.074	0.072
2015	74	0.084	0.083	0.072	0.071	0.068
2016	98	0.083	0.081	0.081	0.075	0.074
Average	89				0.073	



**Environmental Protection Agency****Pt. 51**

As shown in Example 2, this site fails to meet the primary and secondary O<sub>3</sub> NAAQS because the 3-year average of the annual fourth-highest daily maximum 8-hour average O<sub>3</sub> concentrations (*i.e.*, 0.073333 ppm, truncated to 0.073 ppm) is greater than 0.070 ppm, even though the annual data completeness is less than 75% in one year and the 3-year average data completeness is less than 90% (*i.e.*, design value would not otherwise be considered valid).

[80 FR 65458, Oct. 26, 2015]

**PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS**

**Subpart A—Air Emissions Reporting Requirements**

**GENERAL INFORMATION FOR INVENTORY PREPARERS**

Sec.

- 51.1 Who is responsible for actions described in this subpart?
- 51.5 What tools are available to help prepare and report emissions data?
- 51.10 [Reserved]

**SPECIFIC REPORTING REQUIREMENTS**

- 51.15 What data does my state need to report to EPA?
- 51.20 What are the emission thresholds that separate point and nonpoint sources?
- 51.25 What geographic area must my state's inventory cover?
- 51.30 When does my state report which emissions data to EPA?
- 51.35 How can my state equalize the emission inventory effort from year to year?
- 51.40 In what form and format should my state report the data to EPA?
- 51.45 Where should my state report the data?
- 51.50 What definitions apply to this subpart?

APPENDIX A TO SUBPART A OF PART 51—TABLES

APPENDIX B TO SUBPART A OF PART 51 [RESERVED]

**Subparts B–E [Reserved]**

**Subpart F—Procedural Requirements**

- 51.100 Definitions.
- 51.101 Stipulations.
- 51.102 Public hearings.
- 51.103 Submission of plans, preliminary review of plans.
- 51.104 Revisions.
- 51.105 Approval of plans.

**Subpart G—Control Strategy**

- 51.110 Attainment and maintenance of national standards.
- 51.111 Description of control measures.
- 51.112 Demonstration of adequacy.
- 51.113 [Reserved]
- 51.114 Emissions data and projections.
- 51.115 Air quality data and projections.
- 51.116 Data availability.
- 51.117 Additional provisions for lead.
- 51.118 Stack height provisions.
- 51.119 Intermittent control systems.
- 51.120 Requirements for State Implementation Plan revisions relating to new motor vehicles.
- 51.121 Findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen.
- 51.122 Emissions reporting requirements for SIP revisions relating to budgets for NO<sub>x</sub> emissions.
- 51.123 Findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen pursuant to the Clean Air Interstate Rule.
- 51.124 Findings and requirements for submission of State implementation plan revisions relating to emissions of sulfur dioxide pursuant to the Clean Air Interstate Rule.
- 51.125 [Reserved]
- 51.126 Determination of widespread use of ORVR and waiver of CAA section 182(b)(3) Stage II gasoline vapor recovery requirements.

**Subpart H—Prevention of Air Pollution Emergency Episodes**

- 51.150 Classification of regions for episode plans.
- 51.151 Significant harm levels.
- 51.152 Contingency plans.
- 51.153 Reevaluation of episode plans.

**Subpart I—Review of New Sources and Modifications**

- 51.160 Legally enforceable procedures.
- 51.161 Public availability of information.
- 51.162 Identification of responsible agency.
- 51.163 Administrative procedures.
- 51.164 Stack height procedures.
- 51.165 Permit requirements.
- 51.166 Prevention of significant deterioration of air quality.

**Subpart J—Ambient Air Quality Surveillance**

- 51.190 Ambient air quality monitoring requirements.



**§ 50.18**

(c) The level of the standard shall be measured by a reference method based on appendix A or A-1 of this part, or by a Federal Equivalent Method (FEM) designated in accordance with part 53 of this chapter.

[75 FR 35592, June 22, 2010]

**§ 50.18 National primary ambient air quality standards for PM<sub>2.5</sub>.**

(a) The national primary ambient air quality standards for PM<sub>2.5</sub> are 12.0 micrograms per cubic meter (µg/m<sup>3</sup>) annual arithmetic mean concentration and 35 µg/m<sup>3</sup> 24-hour average concentration measured in the ambient air as PM<sub>2.5</sub> (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) by either:

(1) A reference method based on appendix L to this part and designated in accordance with part 53 of this chapter; or

(2) An equivalent method designated in accordance with part 53 of this chapter.

(b) The primary annual PM<sub>2.5</sub> standard is met when the annual arithmetic mean concentration, as determined in accordance with appendix N of this part, is less than or equal to 12.0 µg/m<sup>3</sup>.

(c) The primary 24-hour PM<sub>2.5</sub> standard is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of this part, is less than or equal to 35 µg/m<sup>3</sup>.

[78 FR 3277, Jan. 15, 2013]

**§ 50.19 National primary and secondary ambient air quality standards for ozone.**

(a) The level of the national 8-hour primary ambient air quality standard for ozone (O<sub>3</sub>) is 0.070 parts per million (ppm), daily maximum 8-hour average, measured by a reference method based on appendix D to this part and designated in accordance with part 53 of this chapter or an equivalent method designated in accordance with part 53 of this chapter.

(b) The 8-hour primary O<sub>3</sub> ambient air quality standard is met at an ambient air quality monitoring site when the 3-year average of the annual fourth-highest daily maximum 8-hour average O<sub>3</sub> concentration is less than or equal to 0.070 ppm, as determined in

**40 CFR Ch. I (7-1-18 Edition)**

accordance with appendix U to this part.

(c) The level of the national secondary ambient air quality standard for O<sub>3</sub> is 0.070 ppm, daily maximum 8-hour average, measured by a reference method based on appendix D to this part and designated in accordance with part 53 of this chapter or an equivalent method designated in accordance with part 53 of this chapter.

(d) The 8-hour secondary O<sub>3</sub> ambient air quality standard is met at an ambient air quality monitoring site when the 3-year average of the annual fourth-highest daily maximum 8-hour average O<sub>3</sub> concentration is less than or equal to 0.070 ppm, as determined in accordance with appendix U to this part.

[80 FR 65452, Oct. 26, 2015]

**APPENDIX A-1 TO PART 50—REFERENCE MEASUREMENT PRINCIPLE AND CALIBRATION PROCEDURE FOR THE MEASUREMENT OF SULFUR DIOXIDE IN THE ATMOSPHERE (ULTRAVIOLET FLUORESCENCE METHOD)****1.0 APPLICABILITY**

1.1 This ultraviolet fluorescence (UVF) method provides a measurement of the concentration of sulfur dioxide (SO<sub>2</sub>) in ambient air for determining compliance with the national primary and secondary ambient air quality standards for sulfur oxides (sulfur dioxide) as specified in § 50.4, § 50.5, and § 50.17 of this chapter. The method is applicable to the measurement of ambient SO<sub>2</sub> concentrations using continuous (real-time) sampling. Additional quality assurance procedures and guidance are provided in part 58, appendix A, of this chapter and in Reference 3.

**2.0 PRINCIPLE**

2.1 This reference method is based on automated measurement of the intensity of the characteristic fluorescence released by SO<sub>2</sub> in an ambient air sample contained in a measurement cell of an analyzer when the air sample is irradiated by ultraviolet (UV) light passed through the cell. The fluorescent light released by the SO<sub>2</sub> is also in the ultraviolet region, but at longer wavelengths than the excitation light. Typically, optimum instrumental measurement of SO<sub>2</sub> concentrations is obtained with an excitation wavelength in a band between approximately 190 to 230 nm, and measurement of the SO<sub>2</sub> fluorescence in a broad band around 320 nm, but these wavelengths are not necessarily

## § 51.1303

## 40 CFR Ch. I (7-1-18 Edition)

**§ 51.1303 Application of classification and attainment date provisions in CAA section 181 to areas subject to § 51.1302.**

(a) In accordance with CAA section 181(a)(1), each area designated non-attainment for the 2015 ozone NAAQS shall be classified by operation of law at the time of designation. The classification shall be based on the 8-hour

design value for the area at the time of designation, in accordance with Table 1 of this paragraph (a). A state may request a higher or lower classification as provided in paragraphs (b) and (c) of this section. For each area classified under this section, the attainment date for the 2015 NAAQS shall be as expeditious as practicable, but not later than the date provided in Table 1 as follows:

TABLE 1 TO PARAGRAPH (a)—CLASSIFICATIONS AND ATTAINMENT DATES FOR 2015 8-HOUR OZONE NAAQS (0.070 ppm) FOR AREAS SUBJECT TO § 51.1302

Area class		8-hour ozone design value (ppm)	Primary standard attainment date (years after the effective date of designation for 2015 primary NAAQS)
Marginal	from up to *	0.071	3
Moderate	from up to *	0.081	6
Serious	from up to *	0.093	9
Severe-15	from up to *	0.105	15
Severe-17	from up to *	0.111	17
Extreme	equal to or above	0.163	20

\* But not including.

(b) A state may request, and the Administrator must approve, a higher classification for an area for any reason in accordance with CAA section 181(b)(3).

(c) A state may request, and the Administrator may in the Administrator's discretion approve, a higher or lower classification for an area in accordance with CAA section 181(a)(4).

APPENDIXES A-K TO PART 51

[RESERVED]

APPENDIX L TO PART 51—EXAMPLE REGULATIONS FOR PREVENTION OF AIR POLLUTION EMERGENCY EPISODES

The example regulations presented herein reflect generally recognized ways of preventing air pollution from reaching levels that would cause imminent and substantial endangerment to the health of persons. States are required under subpart H to have emergency episodes plans but they are not required to adopt the regulations presented herein.

1.0 *Air pollution emergency.* This regulation is designed to prevent the excessive buildup of air pollutants during air pollution episodes, thereby preventing the occurrence of

an emergency due to the effects of these pollutants on the health of persons.

1.1 *Episode criteria.* Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. In making this determination, the Director will be guided by the following criteria:

(a) *Air Pollution Forecast:* An internal watch by the Department of Air Pollution Control shall be actuated by a National Weather Service advisory that Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric condition.

(b) *Alert:* The Alert level is that concentration of pollutants at which first stage control actions is to begin. An Alert will be declared when any one of the following levels is reached at any monitoring site:

SO<sub>2</sub>—800 µg/m<sup>3</sup> (0.3 p.p.m.), 24-hour average.

PM<sub>10</sub>—350 µg/m<sup>3</sup>, 24-hour average.

CO—17 mg/m<sup>3</sup> (15 p.p.m.), 8-hour average.

Ozone (O<sub>3</sub>) = 400 µg/m<sup>3</sup> (0.2 ppm)-hour average.

NO<sub>2</sub>—1130 µg/m<sup>3</sup> (0.6 p.p.m.), 1-hour average, 282 µg/m<sup>3</sup> (0.15 p.p.m.), 24-hour average.

## Environmental Protection Agency

Pt. 58

SCHEDULE D.7—HORIZON VALUE OF CASH FLOWS  
[Smelter identification]

	Line	Final forecast years		Horizon years					Total
		1989	1990	1991	1992	1993	1994	1995	
A. Depreciation-free horizon value:									
1. Net cash flow projections ...	01	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
2. Depreciation tax savings:									
a. Depreciation and amortization	02	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
b. Marginal tax rate ..	03	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
c. Tax savings	04	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
3. Depreciation-free net cash flows:									
a. Nominal dollar values	05	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
b. 1990 dollar values	06	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
c. Average	07	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
4. Horizon factor	08	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
5. Depreciation-free horizon value	09	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
B. Depreciation tax savings over the horizon period:									
1. Depreciation and amortization	10	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
2. Marginal tax rate	11	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
3. Tax savings	12	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
4. Discount factors	13	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
5. Present value of tax savings	14	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
6. Total present value of tax savings	15	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
C. Horizon Value	16	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX

## PART 58—AMBIENT AIR QUALITY SURVEILLANCE

## Subpart E [Reserved]

## Subpart F—Air Quality Index Reporting

## Subpart A—General Provisions

58.50 Index reporting.

Sec.

## Subpart G—Federal Monitoring

58.1 Definitions.

58.60 Federal monitoring.

58.2 Purpose.

58.61 Monitoring other pollutants.

58.3 Applicability.

## Subpart B—Monitoring Network

58.10 Annual monitoring network plan and periodic network assessment.

APPENDIX A TO PART 58—QUALITY ASSURANCE REQUIREMENTS FOR MONITORS USED IN EVALUATIONS OF NATIONAL AMBIENT AIR QUALITY STANDARDS

58.11 Network technical requirements.

APPENDIX B TO PART 58—QUALITY ASSURANCE REQUIREMENTS FOR PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AIR MONITORING

58.12 Operating schedules.

APPENDIX C TO PART 58—AMBIENT AIR QUALITY MONITORING METHODOLOGY

58.13 Monitoring network completion.

APPENDIX D TO PART 58—NETWORK DESIGN CRITERIA FOR AMBIENT AIR QUALITY MONITORING

58.14 System modification.

APPENDIX E TO PART 58—PROBE AND MONITORING PATH SITING CRITERIA FOR AMBIENT AIR QUALITY MONITORING

58.15 Annual air monitoring data certification.

APPENDIX F TO PART 58 [RESERVED]

58.16 Data submittal and archiving requirements.

APPENDIX G TO PART 58—UNIFORM AIR QUALITY INDEX (AQI) AND DAILY REPORTING

## Subpart C—Special Purpose Monitors

58.20 Special purpose monitors (SPM).

AUTHORITY: 42 U.S.C. 7403, 7405, 7410, 7414, 7601, 7611, 7614, and 7619.

## Subpart D—Comparability of Ambient Data to the NAAQS

58.30 Special considerations for data comparisons to the NAAQS.



**§ 58.1****40 CFR Ch. I (7–1–18 Edition)**

SOURCE: 44 FR 27571, May 10, 1979; 59 FR 41628, Aug. 12, 1994, unless otherwise noted.

**Subpart A—General Provisions**

SOURCE: 71 FR 61296, Oct. 17, 2006, unless otherwise noted.

**§ 58.1 Definitions.**

As used in this part, all terms not defined herein have the meaning given them in the Clean Air Act.

*AADT* means the annual average daily traffic.

*Act* means the Clean Air Act as amended (42 U.S.C. 7401, *et seq.*)

*Additive and multiplicative bias* means the linear regression intercept and slope of a linear plot fitted to corresponding candidate and reference method mean measurement data pairs.

*Administrator* means the Administrator of the Environmental Protection Agency (EPA) or his or her authorized representative.

*Air quality system (AQS)* means the EPA's computerized system for storing and reporting of information relating to ambient air quality data.

*Approved regional method (ARM)* means a continuous PM<sub>2.5</sub> method that has been approved specifically within a state or local air monitoring network for purposes of comparison to the NAAQS and to meet other monitoring objectives.

*AQCR* means air quality control region.

*Area-wide* means all monitors sited at neighborhood, urban, and regional scales, as well as those monitors sited at either micro- or middle-scale that are representative of many such locations in the same CBSA.

*Certifying agency* means a state, local, or tribal agency responsible for meeting the data certification requirements in accordance with § 58.15 for a unique set of monitors.

*Chemical Speciation Network (CSN)* includes Speciation Trends Network stations (STN) as specified in paragraph 4.7.4 of appendix D of this part and supplemental speciation stations that provide chemical species data of fine particulate.

*CO* means carbon monoxide.

*Combined statistical area (CSA)* is defined by the U.S. Office of Management

and Budget as a geographical area consisting of two or more adjacent Core Based Statistical Areas (CBSA) with employment interchange of at least 15 percent. Combination is automatic if the employment interchange is 25 percent and determined by local opinion if more than 15 but less than 25 percent.

*Core-based statistical area (CBSA)* is defined by the U.S. Office of Management and Budget, as a statistical geographic entity consisting of the county or counties associated with at least one urbanized area/urban cluster of at least 10,000 population, plus adjacent counties having a high degree of social and economic integration. Metropolitan Statistical Areas (MSAs) and micropolitan statistical areas are the two categories of CBSA (metropolitan areas have populations greater than 50,000; and micropolitan areas have populations between 10,000 and 50,000). In the case of very large cities where two or more CBSAs are combined, these larger areas are referred to as combined statistical areas (CSAs).

*Corrected concentration* pertains to the result of an accuracy or precision assessment test of an open path analyzer in which a high-concentration test or audit standard gas contained in a short test cell is inserted into the optical measurement beam of the instrument. When the pollutant concentration measured by the analyzer in such a test includes both the pollutant concentration in the test cell and the concentration in the atmosphere, the atmospheric pollutant concentration must be subtracted from the test measurement to obtain the corrected concentration test result. The corrected concentration is equal to the measured concentration minus the average of the atmospheric pollutant concentrations measured (without the test cell) immediately before and immediately after the test.

*Design value* means the calculated concentration according to the applicable appendix of part 50 of this chapter for the highest site in an attainment or nonattainment area.

*EDO* means environmental data operations.

*Effective concentration* pertains to testing an open path analyzer with a high-concentration calibration or audit